About this User's Manual

This user's manual is designed to let you easily find the information you need to get the most from your notebook.

- Introduces you to the features of your notebook. (1st ID and 2nd ID)
- Gives you useful details on using your notebook.
- Tells you how to look after your notebook, whether at home or traveling.
- Talks about PC Card peripherals and how to use them.
- Goes into more detail about power management and explains how to conserve power while on the move.
- Introduces you to BIOS, the nervous system of your computer, and how to change its fundamental settings.
- Talks about the TV tuner.

There is no need to read the manual from the beginning to end. Simply find your way to the section that interests you using the index, or browse through the manual.

You will come across the following icons in the manual:

Helpful pointers and tricks to get more from your notebook

To help you note and avoid possible damage to your notebook's hardware or software, or loss of your work

Points out possible damage to property, personal injury or death

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Safety Instructions

Use the following safety guidelines to help protect yourself and your computer.

General Warnings

- Do not operate your portable computer for an extended period of time with the base resting directly on your body. With extended operation, heat can potentially build up in the base. Allowing sustained contact with the skin could cause discomfort or, eventually, a burn.
- Do not attempt to service the computer yourself. Always follow installation instructions closely.
- To avoid personal injury from electric shock or fire:
  - Completely power down the computer when replacing memory modules, cleaning the computer, its components, or chassis, or performing operations requiring similar steps. To do this, first turn the power off at the power switch, remove the battery, then disconnect the AC adapter from the electrical outlet or from any other type of external power source, such as an external battery.
  - Do not operate the computer near water, for example, near a bathtub, kitchen sink or laundry tub, in a wet basement, by a swimming pool, or in the rain.
  - Do not connect or disconnect any cables or perform maintenance or reconfiguration of this product during an electrical storm.
  - Avoid using the wired modem or LAN during an electrical storm, as a remote risk of electric shock from lightning exists.
  - Do not push objects into air vents or openings of your computer or accessories. Doing so can short out interior components and may cause fire or electric shock.
  - When installing memory modules, ground yourself by touching a grounded conductive surface, such as a device with a grounded plug. Avoid touching the pins and leads on the memory module or internal circuitry of the computer.
- When setting up the computer for work, place it on a level surface.
- Handle components with care. Hold a component such as a memory module by its edges, not its pins.
- If the battery pack leaks and the fluid get in your eyes, do not rub them. Instead, rinse your eyes with clean running water and immediately seek medical attention. Otherwise, eye injury may result.
- If acid leaking from the battery pack contacts your skin or clothing, immediately wash it away with running water. Otherwise, skin inflammation can occur.
- Operate the computer at the recommended temperature range of +5ºC to +35ºC (+41ºF to +95ºF). Store it at a temperature of -20ºC to +60ºC (+4ºF to +140ºF).

Power Cord & Adapter Warnings

- See the Installation Instructions before connecting to the power supply.
- Power cord sets for use in other countries must meet the requirements of that country. Use the appropriate AC adapter and power cord for your locale.
- If you use an extension cord with your AC adapter, ensure that the total ampere rating of the products plugged into the extension cord does not exceed the ampere rating of the extension cable.
- When using your power cord, make sure to position it around objects so it will not be cut or punctured.
- When you disconnect a cable, pull on its connector on its strain relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.
- Be sure that nothing rests on your AC adapter’s power cable and that the cable is not located where it can be tripped over or stepped on.
- Use only the AC adapters that are approved for use with this computer. Use of another type of adapter may risk fire or explosion.
- Before you connect the computer to a power source, ensure that the voltage rating of the AC adapter matches that of the available power source.
  - 115 V/60 Hz in most of North and South America and some Far Eastern countries such as South Korea and Taiwan.
  - 100 V/50 Hz in eastern Japan and 100 V/60Hz in western Japan.
  - 230 V/50 Hz in most of Europe, the Middle East, and the Far East.
- Place the AC adapter in a ventilated area, such as a desktop or on the floor, when you use it to run the

computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter while it is inside a carrying case.

- To remove power from the computer, turn it off, remove the battery, and disconnect the AC adapter from the electrical outlet.

Battery Pack Warnings

- Do not carry a battery in your pocket, purse, or other container where metal objects (such as car keys) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage from burns.
- Danger of explosion may occur if battery is incorrectly replaced. Replace only with the same or equivalent type battery recommended by the manufacturer.
- Do not dispose of batteries in a fire. They may explode. Check with local authorities for disposal instructions.
- Do not use or leave the battery pack near a heat source. Heat can melt the insulation and damage other safety features, possibly leading it to leak acid, overheat, emit smoke, burst and/or ignite.
- Do not immerse the battery pack in water or allow it to get wet. Its protective features can be damaged. Abnormal chemical reactions may occur, possibly leading it to leak acid, overheat, emit smoke, burst and/or ignite.
- Do not crush, disassemble, puncture, or incinerate short external contacts of battery pack.
- Do not connect the positive (+) and negative (-) terminals with a metal object such as wire. Short-circuiting may occur leading the battery pack to leak acid, overheat, emit smoke, burst and/or ignite.
- Do not use an apparently deformed or damaged battery pack, which may leak acid, overheat, emit smoke, burst and/or ignite.
- If the battery pack leaks, gives off a bad odor, generates heat, becomes discolored or deformed, or in any way appears abnormal during use, recharging or storage, immediately remove it from the computer or charger and stop using it.

Battery Pack Disposal

- Dispose of the lithium ion battery packs only at approved disposal sites. To locate an appropriate site, contact the solid waste disposal officials where you live or look for a rechargeable battery recycling website that lists disposal locations near you.
- Do not dispose of battery packs in a fire, throw them in a trash receptacle, put them in a recycling bin not intended for their disposal, or otherwise discard them in a manner that may result in their being hazardous to the environment.

Internal Modem Warnings

CAUTION: When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- The modem cable you connect to your computer should have a minimum wire size of 26 AWG (American wire gauge) and an UL-compliant RJ-11 modular plug.
- To avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Do not plug a modem connector (RJ-11) into a network connection (RJ-45). This may damage the connector.

Modem Regulatory Notice

Federal Communication Commission PART 68 Warning

This equipment complies with Part 68 of the FCC rules. Located on the bottom side of the modem is a label that contains, among other information, the FCC Registration Number and Ringer Equipment Number (REN) for this equipment. Upon requested, you must provide this information to your telephone company.
If your telephone equipment causes harm to the telephone network, the local telephone company may discontinue your service temporarily. If possible they will notify you in advance. But, if advance notice is not

practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.
Your telephone company may make changes in this facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.
If this equipment should fail to operate properly, disconnect the equipment from the phone line to determine if it is causing the problem. If the problem is with the equipment, discontinue use and contact your dealer or vendor.

TBR21

This equipment has been approved [Council Decision 98/482/EC – "TBR21"] for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

Important safety instructions

Read these instructions carefully. Save these instructions for future reference.

1. Follow all warnings and instructions marked on the product.
2. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or a heat register, or in a built-in installation unless proper ventilation is provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
8. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
10. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
11. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    a. When the power cord or plug is damaged or frayed.
    b. If liquid has been spilled into the product.
    c. If the product has been exposed to rain or water.
    d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extension work by a qualified technician to restore the product to normal condition.
    e. If the product has been dropped or the cabinet has been damaged.
    f. If the product exhibits a distinct change in performance, indicating a need for service.

EMC Regulatory Information

This product is designed and tested to comply with the following related EMC (Electromagnetic compatibility) standards.

FCC Notice

"Declaration of Conformity Information"
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.
Canadian Notice (Canada Only)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.
This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conformé à la norme NMB-003 du Canada.

CE Notice (European Union)

EU Declaration of Conformity

The product conforms to the following standards:
Supplementary Information: "The product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC and/or the R&TTE Directive 1999/05/EEC."

CE

This product is carrying the CE-Mark in accordance with the related European Directives.

BSMI Notice (Taiwan Only)

Most Compal computer products are classified by the Bureau of Standards, Meteorology and Inspection (BSMI) as Class B information technology equipment (ITE).

The symbol that must be marked on the product indicates the product complies with BSMI standard.

BSMI 通告（僅限於台灣地區）

如果您在電腦的底部、側面或背面板上找到一個 標誌，則適用於以下部份的相關規定：

此設備經測試證明符合BSMI(經濟部標準檢驗局)之乙類數位裝置的限定規定。這些限制的目的是爲了在住宅區安裝時，能防止有害的干擾，提供合理的保護。此設備會產生，使用並散發射頻能量；如果未遵照製造廠商的指導手冊來安裝和使用，可能會干擾無線電通訊。但是，這並不保證在個別的安裝中不會產生干擾。您可以透過關閉和開啓此設備來判斷它是否會對廣播和電視收訊造成干擾；如果確實如此，我們建議您嘗試以下列一種或多種方法來排除干擾：

- 重新調整天線的接收方向或重新放置接收天線。
- 增加設備與接收器的距離。

- 增加設備與接收器的距離。
- 將設備連接至不同的插座，使設備與接收器連接在不同的電路上。
- 請向經銷商或有經驗的無線電/電視技術人員查詢，以獲得幫助。

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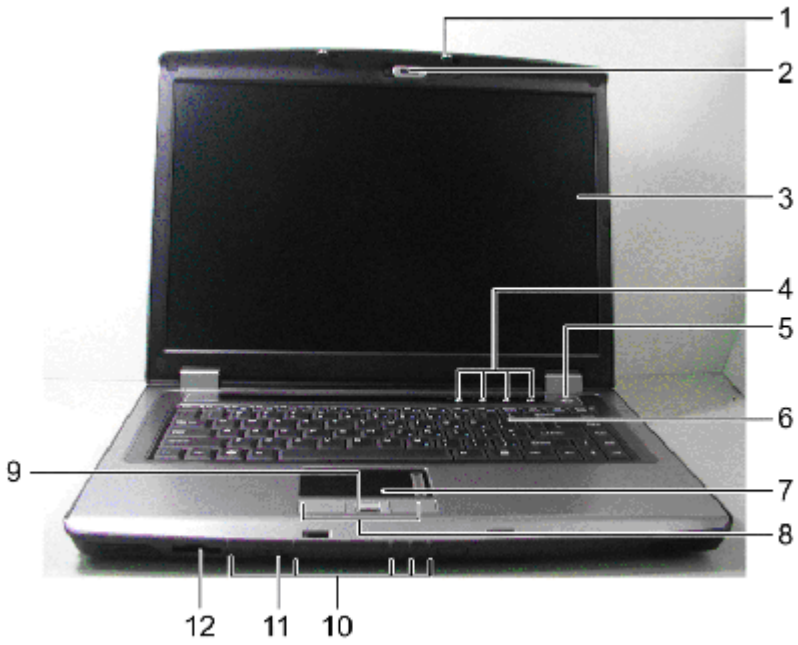
Introducing your notebook

Front Side
Right Side
Left Side
Back Side
Bottom Side

Front Side

The following picture shows the front side of the HEL81 notebook.



1. LCD Module Latch
2. Built-in Camera *
3. Display
4. Easy Buttons
5. Power Button
6. Keyboard
7. Touch Pad
8. Touch Pad Buttons
9. Finger Printer *
10. Device Status Indicators / Power Status
11. Wireless Communication Switch
12. Multiple Digital Media Card Slot

*The availability of this feature is dependant on the model you purchased.

LCD Module Latch

The LCD Module Latch secures the display case to your notebook. To open the display, slide the latch to the right and lift the display. When you close the display, the latch secures it automatically.

Built-in Camera

The built-in camera supports 1.3mega pixel CMOS web camera.

Display

Your display is a 15.4” COLOR TFT/WXGA.

Power Button

Press to turn your notebook on. For more on power settings see Power Management.

	Windows XP, which comes preinstalled, goes into the shutdown sequence automatically if you press the power button while on.You can configure this in Control Panel: Power Options – Advanced.

Easy Buttons

These buttons launch your favorite programs.

User define buttons

Internet access button

Email button

Keyboard

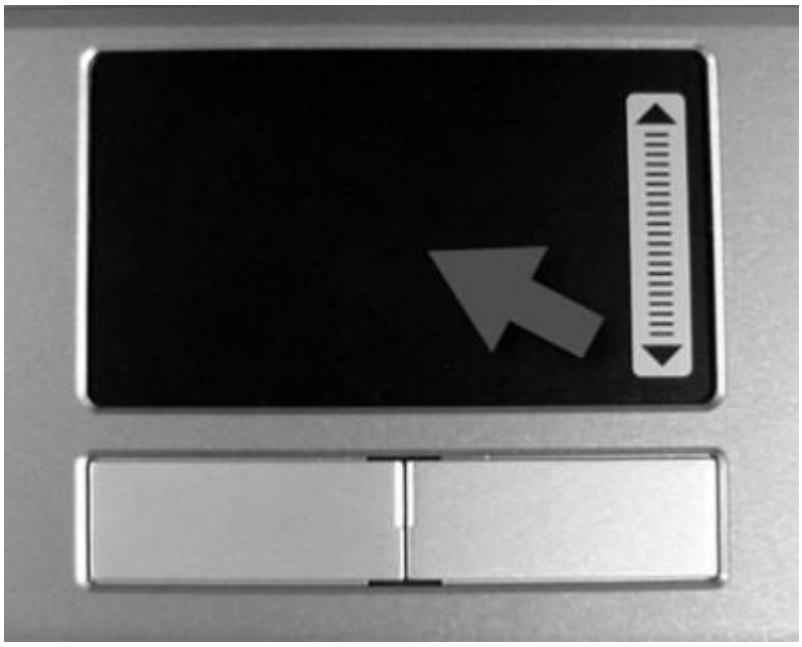
The keyboard includes a numeric keypad and the Microsoft® Windows® logo key.

See Keyboard and Touch Pad for detail on using keyboard shortcuts.

	Indicates uppercase letter function enabled.
	Indicates numeric keypad enabled.
	Indicates scroll lock function enabled.

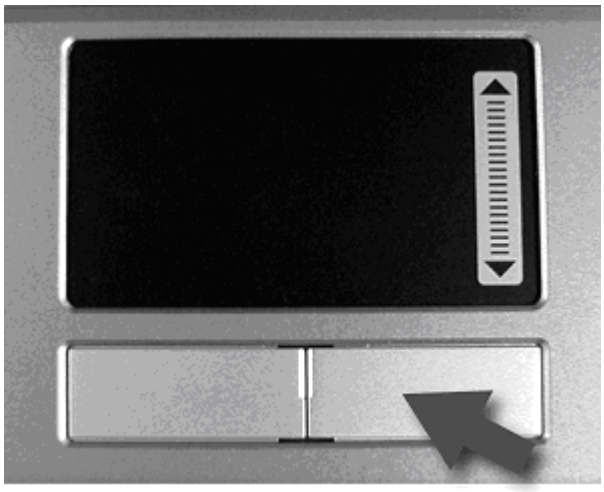
Touch Pad

The touch pad works like a desktop mouse. For more information, see Keyboard and Touch Pad.



Touch Pad Buttons

The left and right touch pad buttons work like the left/right buttons on a standard mouse.

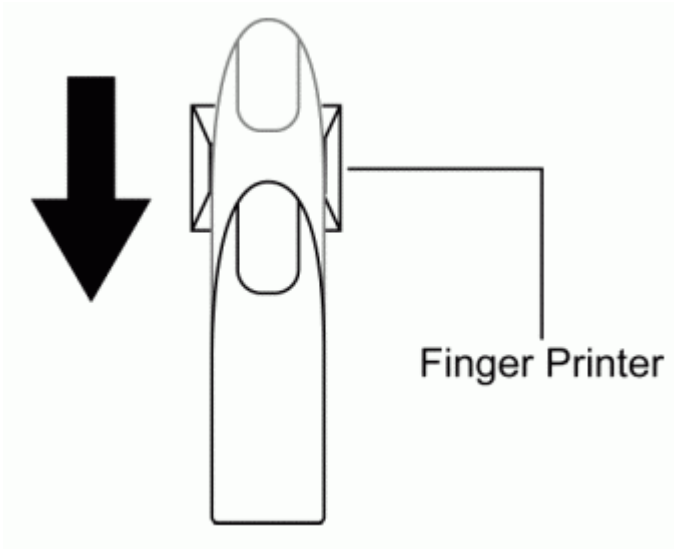


Wireless Communication Switch

Turns the wireless communication function on or off. The wireless communication LED on the front panel lights when the function is activated.

Finger Printer*

(*The availability of this feature is dependant on the model you purchased.)
The finger printer lets you log on to your computer instead of inputting passwords from the keyboard.
To raise the recognition success rate, the following illustrations show the correct way to swipe your finger over the finger printer.

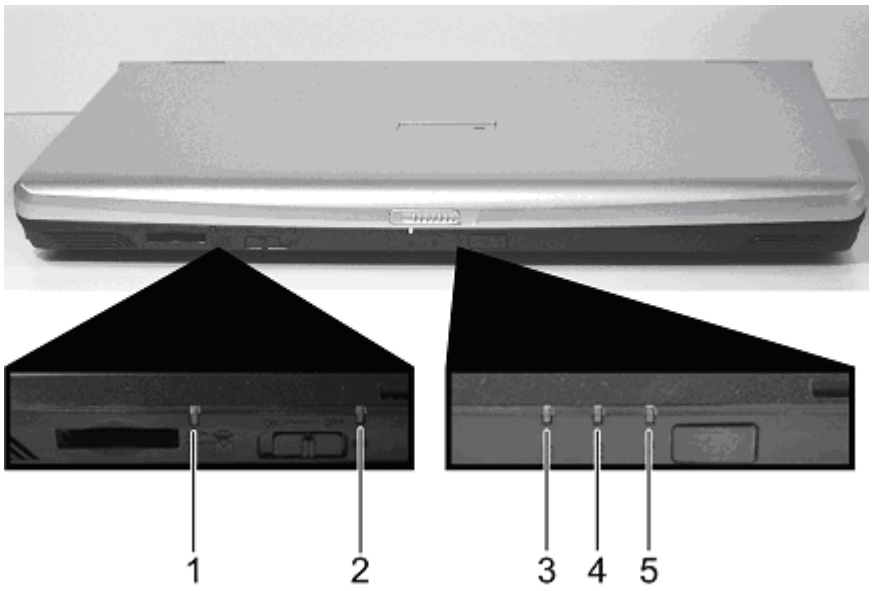


Align your fingertip with the finger printer as shown in the drawing and swipe.
To reduce the damage to the finger printer and fingerprint recognition problems, follow these guidelines when using the finger printer.

- Do not scratch or poke the finger printer with your nails or any hard or sharp objects.
- Do not press the finger printer strongly.
- Do not touch the finger printer with a wet finger or any wet objects. Keep finger printer surface dry and free of water vapor.
- Do not touch the finger printer with a soiled finger. Minute foreign particles on a soiled or dirty finger may scratch the finger printer.
- Do not paste stickers or write on the finger printer.
- Do not touch the sensor with a finger or any object with built-up static electricity.

Device Status Indicators / Power Status

The LEDs in the front side of notebook indicate the device and power status.



1.	For SD/MS/MMC Card (green)
2.	WireLess (amber)
3.	Power On (green)
4.	Battery Charge (green/amber)
5.	HDD (green)

The flashing Power On LED indicates the notebook is in standby mode.
For detailed battery status, see Battery.

Multiple Digital Media Card Slot

Supports one SD/MMC/MS/MS Pro card, which is used in digital still camera and various forms of portable information equipment.

Menu Items

Menu	Description
Root menu	Displays the title's menu.
Go to	Jumps to DVD title.
Chapter	Displays the chapter's menu.
DVD Info	
Region Code	Displays player region code info.
Region Change	Displays player Remain Change info.

Use "Enter" to selection and use "ESC" to exit.

Photo Viewer

Function Buttons

Function	Hot Key	Description
Power On	***Mode button*** ***IOMP button*** ***(Remote Controller)***	Boolean switch. It will start playing media if one of supported disk is already inside CD-ROM (auto media detection).
Power Off	***Mode button*** ***Power button***	Turns off IOMP mode.
Display Brightness Up	***Fn+↑*** ***Brightness*** + ***(Remote Controller)***	Makes panel brighter in current session only. (No OSD display.)
Display Brightness Down	***Fn+↓*** ***Brightness*** _ ***(Remote Controller)***	Makes panel dimmer in current session only. (No OSD display.)
Display Switch	***Fn+F5***	Switches display to CRT/LCD.

No other Hot-Key supported in this mode.

Browser Mode

Move	←→↑↓	Moves cursor.
Select	***Enter***	Selects the folder and photo.
Previous Photo	***Page Up***	Moves to preview page.
Next Photo	***Page Down***	Moves to Next page.
Help	***F1***	Pops about viewer help until press "ESC" key. (Can't adjust any Function Buttons except making display switch and display brightness adjustments.)
Quit	***Esc/*** ■	Quit this device Browser window.
Eject CD	■	Ejects discs from CD/DVD-ROM drive.

Viewer Mode: Look single photo.

Full Screen select	***F*** ***Full Screen***	Switches display between the default screens to full screen output.
Fit Image	***1***	Adjusts fit photo size.
Fit Width	***2***	In full screen, adjusts fit photo width size in 4:3 display types. (Show width screen icon on

		bottom -right screen.)
Fit Height	***3***	Adjusts fit photo height size.
Rotate -90°	***(9***	Rotates clockwise single photo 90°.
Rotate 90°	***) 0***	Rotates anti-clockwise single photo 90°.
Zoom Out	**-**	Zooms out single photo.
Zoom In	**+**	Zooms in single photo.
Previous Photo	***Page Up***	Moves to preview photo.
Next Photo	***Page Down***	Moves to Next photo.
Move	← → ↑ ↓	Moves photo position.
Slide Show	***S***	Switches to slide mode.
Help	***F1***	Pops about viewer help until press “ESC” key. (Can’t adjust any Function Buttons except making display switch and display brightness adjustments.)
Quit	***Esc /*** ■	Quit this device Viewer window.

Slide Mode: The photo continuous plays until press any function key.

Menu	***M***	Pops about pause interval and effect until press “ESC” key. (Can adjust any Function Buttons.)
Play	▸ II	Plays Photo viewer when in stop/pause mode. (Show “Play” icon on bottom-right screen.)
Pause	▸ II	Pauses playing photo viewer when in play mode. (Show “Pause” icon on bottom-right screen.)
Previous Photo	***Page Up***	Moves to preview photo.
Next Photo	***Page Down***	Moves to Next photo.
Help	***F1***	Pops about slid show help until press “ESC” key. (Can’t adjust any Function Buttons except making display switch and display brightness adjustments.)
Quit	***Esc /*** ■	Quit this device Slide Mode.

Menu Items

Menu	Description
Duration	Setting how many second to play next photo in slide mode.
Slideshow transition	Setting how many effect to play next photo in slide mode.

Use "Enter" to selection and use “ESC” to exit.

Right Side

The following picture shows the right side of the HEL81 notebook.

1. Audio Ports
2. USB Ports
3. Optical Media Drive
4. VGA Port

Audio Ports

You can connect a headphone or an external speaker to the port and a microphone to the port. The built-in speakers are disabled when a device is connected to the port.

USB Port

Use this port to connect a USB device, such as a mouse, full-size external keyboard, or printer, to the computer.

USB is a peripheral expansion standard that supports a data-transfer rate up to 480 Mbps. USB peripherals have a single standard for cables and connectors. You can install and remove USB devices while the computer is on. This is known as "hot swapping".

Optical Media Drive

The optical media drive provides a means for you to import/export data and small files into/from your computer. Depending on the configuration of your computer, you may either be able to record CDs or play DVDs.

VGA Port

Use this port to connect an external monitor to your computer. See Display.

Left Side

The following picture shows the left side of the HEL81 notebook.

1. Video-in Port
2. TV-Antenna in Port
3. USB Port
4. IEEE 1394 Port
5. LAN Jack
6. PC Card Slot
7. Express Card Slot

TV-Antenna in Port

Use this port to connect an antenna set. See Display.

USB Port

Use this port to connect a USB device, such as a mouse, full-size external keyboard, or printer, to the computer.

USB is a peripheral expansion standard that supports a data-transfer rate up to 480 Mbps. USB peripherals have a single standard for cables and connectors. You can install and remove USB devices while the computer is on. This is known as "hot swapping".

IEEE 1394 Port

The IEEE 1394 port allows you to connect devices that utilize IEEE 1394 technology to your computer. This technology is widely used in consumer products such as digital cameras.

LAN Jack

The RJ-45 network jack allows you to connect your computer to a local area network (LAN).

Be careful not to plug the telephone line into the slightly larger network connector.

PC Card Slot

Supports one Type II PC card. For more information, see PC Cards and Express Cards.

Express Card Slot

Supports one 54mm type PCI Express card. For more information, see PC Cards and Express Cards.

Back Side

The following picture shows the back side of the HEL80 notebook.

1. AC Adapter Connector
2. K-Lock
3. Modem Jack
4. S-Video Jack out Port

AC Adapter Connector

Use this connector to attach the AC adapter to your notebook. You can connect an AC adapter when your notebook is switched on or off.

While the AC adapter works with electrical outlets worldwide, power connectors and power strips vary from country to country. Ensure you use compatible cable or correctly connect the cable to the power strip or electrical outlet. Failure to do so may cause fire or damage to equipment.

Modem Jack

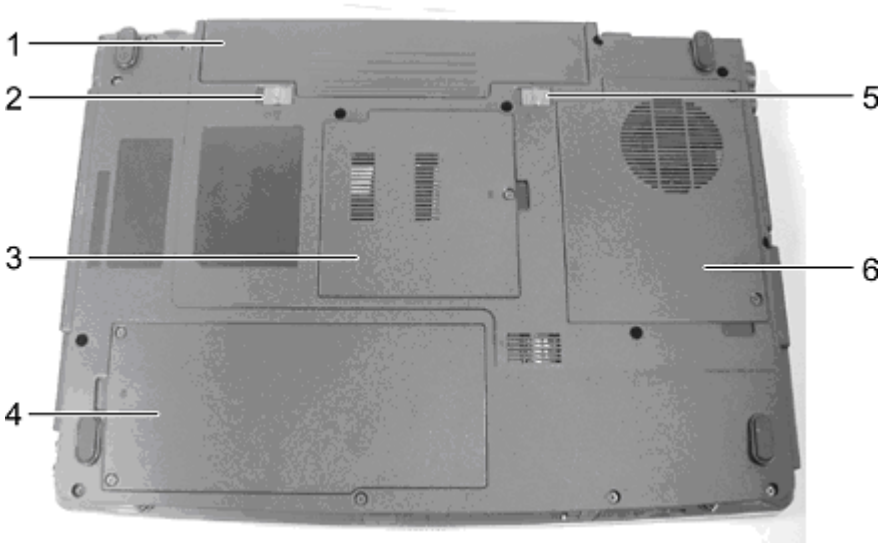
The modem jack allows you to connect your notebook to a telephone line with a standard RJ-11 connector.

S-Video/Composite Jack out Port

Support external display device through the S-video, like TV set or device which has S-video port.

Bottom Side

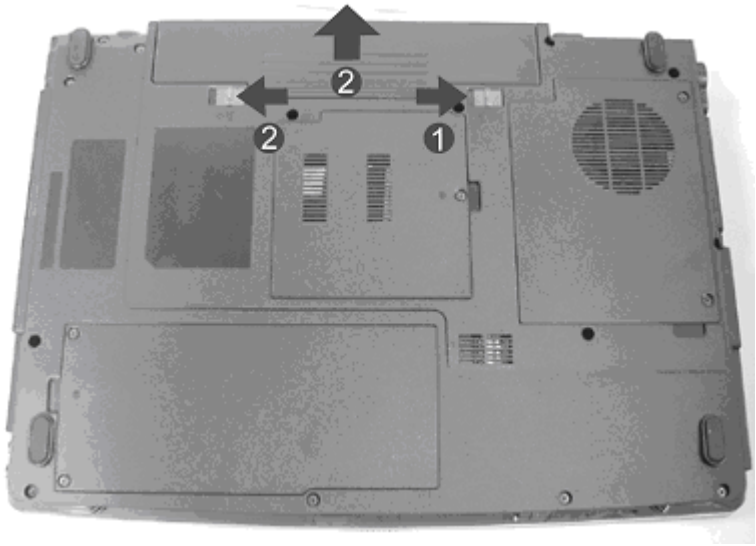
The following picture shows the bottom side of the HEL81 notebook.



1 Battery Pack
2 Battery Pack Latch
3 Memory Module Cover
4 HDD Cover
5 Battery Lock Switch
6 Thermal Module Cover

Battery Pack

With a charged battery pack installed, you can use your notebook without connecting it to an electrical outlet. For more details, see Battery.



To remove the Battery Pack:

1. Move the Battery Lock Switch to the right (Unlock position).
2. Slide the Battery Pack Latch to the left and gently pry the Battery Pack from the computer chassis.

Battery Pack Latch

The Battery Pack Latch secures the battery pack. To release, slide the latch and then remove the battery pack from the bay.

Operating Your Notebook

Turning Your Notebook On and Off
Tips for Using Windows
Keyboard and Touch Pad
Personalizing Your Desktop
Display
Networks
Managing Programs
Managing Files
Playing CDs and Movies

Turning Your Notebook On and Off

Turning Your Notebook On
Turning Your Notebook Off
Logging Off
Adding User Accounts
Standby Mode

Turning Your Notebook On

You can configure the computer to start from a specific drive, such as a CD-ROM, an external floppy disk, or even an external device. See BIOS Setup Program*.*

Press the power button ⏻ to turn on your notebook.

Do not turn off the computer until the operating system has loaded completely. Turning the computer off during its initial startup will result in an error the next time you start your notebook.

Turning Your Notebook Off

If your notebook is using Microsoft Windows XP Professional operating system, the security and networking features are not available in Windows XP Home Edition. You will see different options in some windows, related to security and networking.

Save and close any open files, exit any open programs.
Click **Start > Turn Off Computer > Turn Off**.
Your notebook will automatically turn off after the shutdown process is finished.

*You can configure Windows XP to shut down or go into sleep mode by pressing the power button. Open the **Control Panel: Power Options – Advanced** dialog box to do this.*

Logging Off

With Microsoft Windows XP, multiple users can access a single computer with their own, personal settings. Using their own password, each user logs on to the computer, meaning other users cannot access their settings or files. To log off:
Save and close any open files, exit any open programs, click **Start > Log Off > Log Off**.

To switch users, click **Start > Log Off > Switch User**.

Using **Fast User Switching**, programs that previous users were running remain running in the background. This means a possible slower computer response. It may also stop multimedia programs, including games and DVD software, from running.

Fast User Switching *does not work if your notebook is running Windows XP Professional and is a member of a computer domain or if the notebook has less than 128 MB of memory. You can set up* ***Fast User Switching*** *in the Control Panel dialog box, under* ***User Accounts: Change the way users log on or off****.*

Adding User Accounts

Different account options are available when a computer is running the Windows XP Professional operating system and is connected to a domain.

With Windows XP installed, the system administrator or a user with administrator rights can create additional user accounts:

1. Click **Start > Control Panel > User Accounts**.
2. Under **Pick a task**, click **Create a new account**.
3. Under **Name the new account**, enter the name of the new user. Click **Next**.
4. Under **Pick an account type**, choose one of the following options:
   - **Computer administrator**: User can change all computer settings.
   - **Standard (Windows XP Professional only)**: User can install some programs and hardware.
   - **Limited**: User can only change your own personal settings, such as your password. You are not able to install programs or use the Internet.
5. Click **Create Account**.

Standby Mode

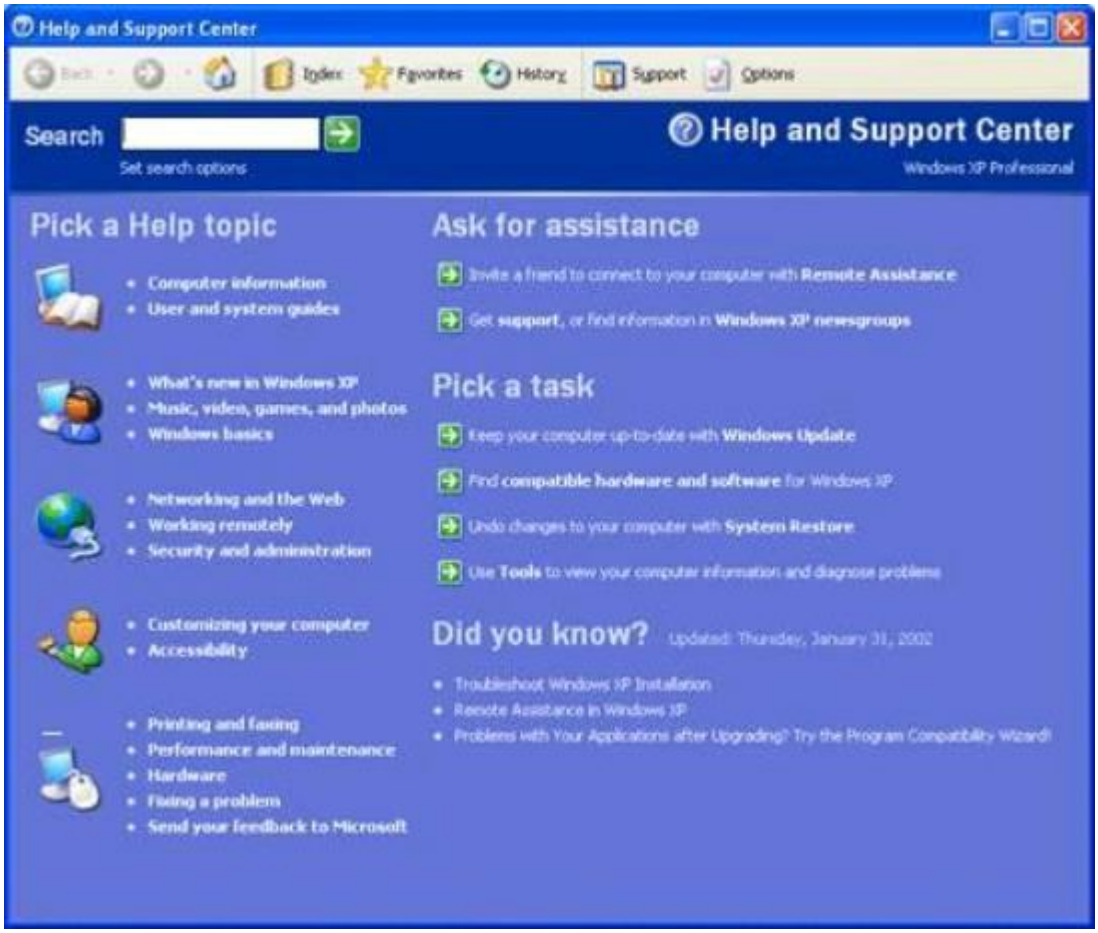
To find out how to conserve power using the Standby Mode, see Power Management.

Tips for Using Windows

Microsoft Windows XP Help
Windows Desktop
Start Button
Taskbar
Notification Area (System Tray)
Recycle Bin
Control Panel
My Computer

Microsoft Windows XP Help

For Microsoft Windows XP help, click the **Start** menu then click the **Help and Support** icon. The Help and Support Center dialog box opens.


Help and Support Center
Index
Favorites
History
Support
Options
Search
Set search options
Help and Support Center
Windows XP Professional
Pick a Help topic
Computer information
User and system guides
What's new in Windows XP
Music, video, games, and photos
Windows basics
Networking and the Web
Working remotely
Security and administration
Customizing your computer
Accessibility
Printing and faxing
Performance and maintenance
Hardware
Fixing a problem
Send your feedback to Microsoft
Ask for assistance
Invite a friend to connect to your computer with Remote Assistance
Get support, or find information in Windows XP newsgroups
Pick a task
Keep your computer up-to-date with Windows Update
Find compatible hardware and software for Windows XP
Undo changes to your computer with System Restore
Use Tools to view your computer information and diagnose problems
Did you know?
Updated: Thursday, January 31, 2002
Troubleshoot Windows XP Installation
Remote Assistance in Windows XP
Problems with Your Applications after Upgrading? Try the Program Compatibility Wizard!

Desktop Cleanup Wizard

The Desktop Cleanup Wizard moves icons for programs not frequently used to a folder 7 days after you first start your notebook and every 60 days after that.
The Start menu's appearance changes as program icons are moved. To turn off the Desktop Cleanup Wizard:
Right-click an empty spot on your desktop **> Properties > Desktop > Customize Desktop >** click **Run Desktop Cleanup Wizard every 60 days** to remove the check mark **> OK**.
The Desktop Cleanup Wizard can be run any time by simply clicking **Clean Desktop Now** under **Desktop Cleanup**.

Windows Desktop

Depending on your notebook setup and software, your desktop may have different or additional shortcuts. See Personalizing Your Desktop for more information.

Start Button

The **Start** button allows easy access to your notebook's programs.

The **Start** menu is designed to adapt to show the programs you use most frequently. To always keep an item on the **Start** menu, no matter how often it's used, right-click the item and click **Pin to Start menu**.
Log Off allows the current user to log off so a new user can log on to the notebook using their personal settings.
Turn Off Computer provides options for turning off, restarting, and placing your notebook in power saving modes. If your notebook is running Windows XP Professional and is connected to a domain, different options appear in the **Shut Down** window.

Taskbar

The **Start** button is on the left and the notification area on the right. Each time you open a program, a button for it appears on the taskbar. To move between programs, simply click the relevant button. Windows XP groups multiple instances of the same program on a single taskbar button if more space is needed.
Toolbars can be added to or removed from the taskbar:
Right-click an empty spot on the taskbar, and select **Toolbars > choose the toolbar you want to add.**

Notification Area (System Tray)

The icons in this area allow quick access to programs and computer functions, including the clock and printer status. Windows XP hides icons that are not used frequently. Click to see hidden icons.
To prevent Windows XP from hiding icons:
Right-click an empty spot on the **Taskbar > Properties >** ensure that **Hide inactive icons** is not checked.

Recycle Bin

When you delete a file, it is moved to the **Recycle Bin**. Files can be restored from the **Recycle Bin**. Emptying the **Recycle Bin** deletes files permanently.

Control Panel

In the **Control Panel** you can change how Windows looks and works.
Click the **Start** button and then **Control Panel**.
There are two interfaces - you can choose either **Classic View** or **Category View**. You can switch interfaces in the upper left hand window of the **Control Panel** dialog box.
Under **Pick a Category**, choose the category of the task you wish to complete, and then choose the task in the next window.

My Computer

My Computer allows you to see the contents of your notebook's drives. The **My Computer** icon appears on your Desktop. To see the contents of a drive or folder, open **My Computer** then double-click the icon for the drive or folder you want to view (for example, drive C).

*You can also use **Windows Explorer** to see the contents of your notebook and find files. To open **Windows Explorer**, right-click the **Start** button and click **Explore**. Find the drive or folder that you want to view. To find out more about **My Computer** and **Windows Explorer**, see the **Help and Support Center**.*

Keyboard and Touch Pad

Numeric Keypad
Keyboard Shortcuts
Windows Logo Key Functions
StickyKeys
Touch Pad
Customizing the Touch Pad
Finger Printer

Numeric Keypad

Keypad numbers and symbols are marked in blue on the lower right edge of the keypad keys.

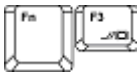
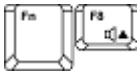
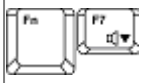
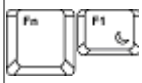
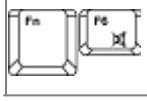
To enable the numeric keypad, press .

The indicator will light when the numeric lock is on.

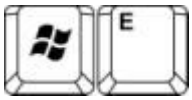
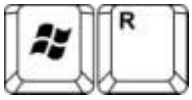
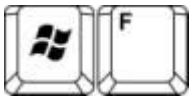
To disable the numeric keypad, press again.

To use the primary function of a dual-function key when the numeric keypad is enabled, press and the desired key.

Keyboard Shortcuts

	Switches Display Mode (LCD > CRT > TV > LCD + CRT Simultaneous > LCD+TV Simultaneous). Switches the video image to the next display or both displays simultaneously.
	Number Lock
	Scroll Lock
	Brightness Up
	Brightness Down
	Audio Volume Up
	Audio Volume Down
	Sleep
	Mute

Windows Logo Key Functions

	Opens Windows Explorer
	Opens the Run dialog box
	Opens the Search Results dialog box
	Opens the Search Results - Computers dialog box (when your notebook is connected to a network)
	Opens the System Properties dialog box

To adjust keyboard operation, including character repeat rate, in the **Control Panel** click **Printers and Other Hardware > Keyboard**.

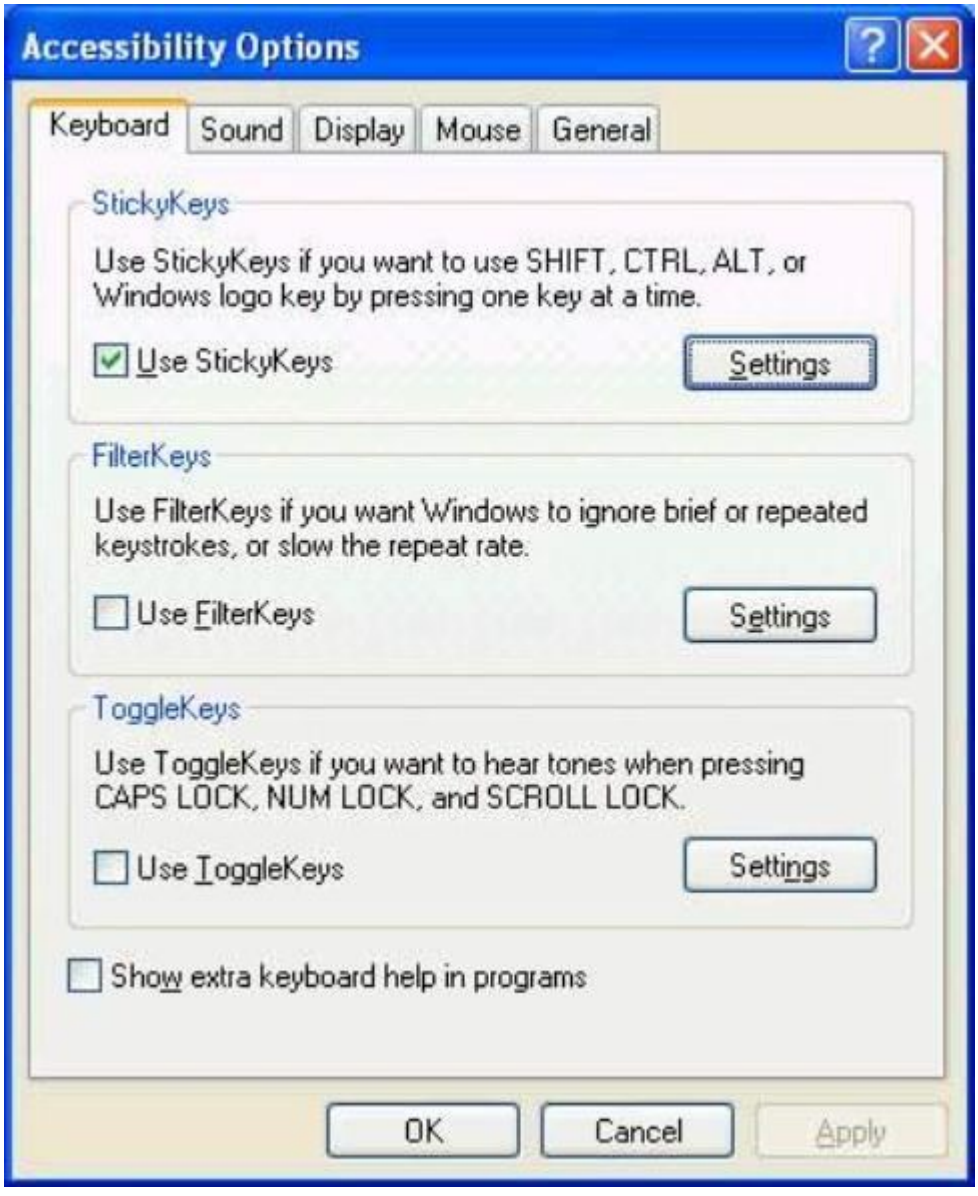
StickyKeys

The StickyKeys function lets you use the SHIFT, CTRL, ALT, FN keys or the Windows logo key (referred to as modifier keys) in conjunction with other keys by pressing one key at a time instead of simultaneously.

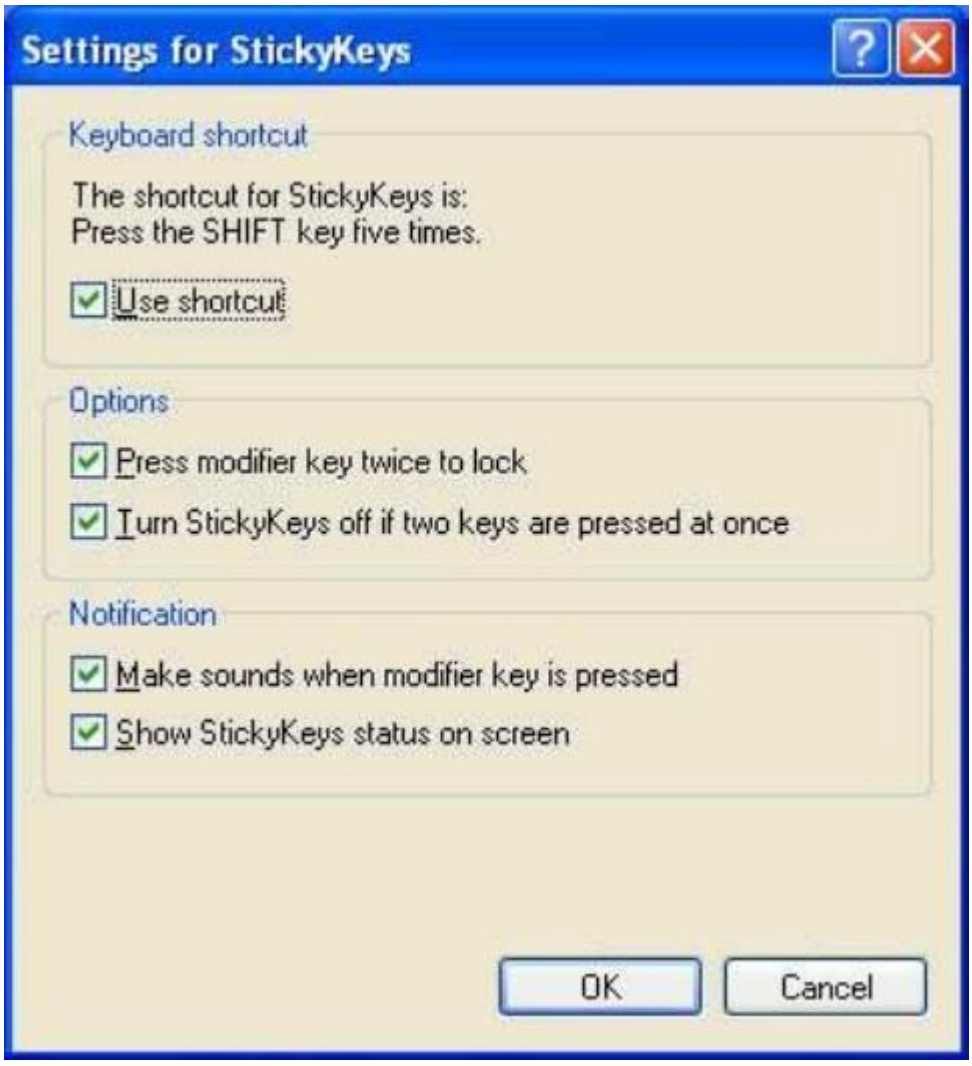
To activate StickyKeys mode, press the Shift key five times and then click **OK**.

StickyKeys
Pressing the SHIFT key 5 times turns on StickyKeys. StickyKeys lets you use the SHIFT, CTRL, ALT, or Windows Logo keys by pressing one key at a time.
To keep StickyKeys on, click OK.
To cancel StickyKeys, click Cancel.
To deactivate the key combination for StickyKeys, click Settings.
OK
Cancel
Settings

Alternatively, you can click on **Start > Control Panel > Accessibility Options** and check **Use StickyKeys** before clicking OK.



To further customize **StickyKeys**, click **Settings** in either of the above dialogue boxes. The following dialogue box will appear.



Click **Use shortcut** to enable the listed shortcut to activate StickyKeys mode.

By checking **Press modifier key twice to lock**, pressing the **SHIFT, CTRL, ALT, FN** or the Windows logo key twice will 'lock' the key until it is pressed again. This allows you to perform multiple commands with these keys in succession without having to press the modifier key again each time.

Check **Turn StickyKeys off if two keys are pressed at once** to have StickyKeys automatically disable whenever any two keys are pressed simultaneously.

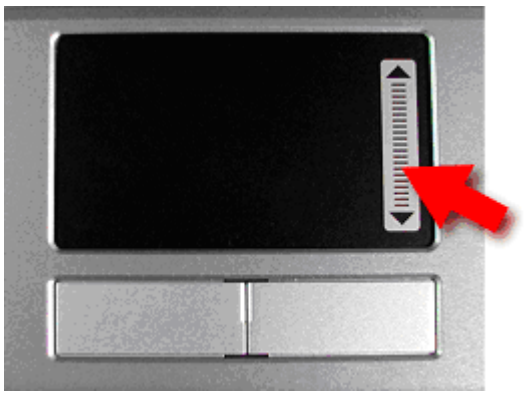
If **Make sounds when modifier key is pressed** is checked, a tone will be heard each time a modifier key is pressed. Different tones are heard when activating and deactivating modifier keys.

Check **Show StickyKeys status on screen** to display the StickyKeys icon in your toolbar whenever the StickyKeys mode is activated. The icon will change to indicate which modifier key, if any, is currently active.

Click on **OK** to confirm your changes, or **Cancel** to exit the dialogue box without making any changes.

Touch Pad

The Touch Pad responds to the movements and pressure of your finger, allowing you to move the cursor around the screen, in the same way you would with a mouse.



Place your fingers on the keyboard in the normal typing position.

You can use the Touch Pad by moving either your right or left thumb off the space bar and on to the Touch Pad.

Gently move your thumb across the Touch Pad in the direction you want the cursor to move.

The Touch Pad buttons have the same function as mouse buttons. Clicking these buttons makes selections, drags objects, or performs a variety of other functions depending on the software. To select an object, first move the pointer over the object you want to select, and then press the left button one time and release it. The functionality of these buttons depends on your software.

Double-clicking is a common technique for selecting objects or launching programs.

You may also select object or execute applications from icons by double tapping. This is similar to double-clicking; instead of pressing the Touch Pad buttons, you tap the Touch Pad itself.

Customizing the Touch Pad

To adjust Touch Pad settings, use the Mouse Properties window, which you can open by clicking **Control Panel** > **Printers and Other Hardware** > **Mouse**.
Select the desired settings and click **Apply**.
Click **OK** to save the settings and close the window.

Personalizing Your Desktop

Choosing a Wallpaper
Choosing a Screen Saver
Choosing a Desktop Theme
Creating a Shortcut on the Desktop

Choosing a Wallpaper

To make your notebook reflect your style, you can set background colors and patterns, the wallpaper, on the desktop.

Control Panel > Appearance and Themes > Pick a task > Change the desktop background.

The **Display Properties** window offers a choice of wallpapers. Choose the name of the wallpaper you want to display, or click (None) if you prefer not to use a wallpaper image.

You can also choose your own images by choosing Browse, and specifying images in a directory.
The Position pull-down menu lets you either **Tile** your selected image, **Center** (places one copy of the image in the center of the screen) or **Stretch** (enlarges it to fit the screen).

To accept the settings, click **OK** and close the **Display Properties** window.

Choosing a Screen Saver

Control Panel > Appearance and Themes > Pick a task > Choose a screen saver.

Select a screen saver from the Screen saver pull-down menu, or click (None) if you prefer not to activate a screen saver.

You can customize your screen saver by choosing **Settings**. To check your selections, choose **Preview** .

To accept the settings, click **OK** and close the **Display Properties** window.

Choosing a Desktop Theme

Desktop themes change the appearance of your desktop and add sound effects:
Control Panel > Appearance and Themes > Pick a task > Change the computer's theme.

Select a theme from the Theme pull-down menu in the **Display Properties** Window, and then click **OK**.

Creating a Shortcut on the Desktop

A shortcut is an icon that is placed on the desktop let you quickly access programs, files, folders, and drivers. To create a shortcut:

Open **My Computer** or **Windows Explorer**, and highlight the file or program you want to create a shortcut to.

Click and hold down the right Touch Pad button, drag the highlighted item to the Windows desktop, and then release the right Touch Pad button to display a pop-up menu.

Click **Create Shortcut(s) Here**.

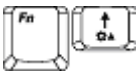
An icon appears on your desktop - double-click to activate the shortcut.

Display

Adjusting Brightness
Using an External Monitor or Television
Setting Display Resolution

Adjusting Brightness

To conserve power when running your notebook from the battery, set the brightness to the lowest comfortable setting using the keyboard shortcuts.



Brightness Up

Brightness Down

Using an External Monitor or Television

When you start your notebook with an external display device such as an external monitor or television attached and turned on, the image may appear on either the display or the external device.

Alternatively, you can press to switch the video image to the display only, the display and the external device simultaneously, or the external device only.

Setting Display Resolution

To view a program at a specific resolution, both the video controller and display must support the program and the necessary video drivers must be installed.

Before changing any of the original display settings, note the original settings for future reference.
Start > Control Panel > Pick a category > Appearance and Themes.

Under **Pick a task...**, click the area you want to change, or under **or pick a Control Panel icon**, click **Display.**

You can try different settings for Color quality and Screen resolution.

If you choose a resolution or color palette that is higher than the display supports, the settings will automatically adjust to the closest possible setting.

Networks

To access a network:

At the office, you can access a network via the built-in PCI-E LAN.

For specific information about connecting to the LAN or WAN, consult your systems administrator.

If you are working at home or while traveling, you need a dial-up connection. Ask your system administrator for the telephone number of the network.

To set up the connection, go to **Start > Control Panel > Network and Internet Connections** (in Classic Interface, **Network Connections**).

Enter the details for your connection and click **OK**.

Managing Programs

Running Programs
Adding Software
Removing Software

Running Programs

Programs are any software that process data - like a word processing program or an email program.

They require an operating system - like Windows XP - to run on.

To run a program, click **Start > Programs**.

Click the program you want to run.

On the right side of the title bar in the window of any open program,
there are three icons:

minimizes the program. That is, it is removed from the screen, but is still running. It will appear as a button on your bottom taskbar. To restore the program, simply click the button.

maximizes the window to fill your entire screen. When the window is maximized, the button switches to , which will reduce the size of the window when clicked.

closes the program or document.

Adding Software

To check what software is already installed on your computer, click **Start > All Programs**. If a program is listed in the **All Programs** menu or the **Start** menu, the software is already installed.

Before installing software, check the software's technical requirements to ensure that it is compatible with your notebook and that there is enough memory and hard drive space for installation and operation.

Temporarily disable your notebook's antivirus software before installing software. See the documentation that came with the antivirus software for detailed procedure.

Be sure to enable your antivirus software once you have installed any new software.

Insert the software installation CD into the CD drive and follow the instructions that came with the software to help you respond to the prompts on the screen.

If the software installation CD does not automatically run, click **Start > Run.** In the dialogue box, type x:\setup.exe (where x is the letter of your CD drive [usually D or E]). Then click **OK** and follow the prompts on your screen.

Removing Software

Once you've begun removing software, do not interrupt the process. To do so may result in data loss and corruption of your operating system.

Start > Control Panel > Add or Remove Programs > Change or Remove Programs.
Select the program that you want to remove and click the Change/Remove button. Instructions for removing programs will appear on the screen.

Some programs may not be listed and cannot be removed via this window. In this case, check the documentation that came with the specific program.

Managing Files

Updating Antivirus Software
Backing Up Files
Finding Files
Copying a File on the Hard Drive
Copying a File to a Floppy Disk
Moving Files
Renaming Files
Deleting Files
Emptying the Recycle Bin
Retrieving Files From the Recycle Bin

Updating Antivirus Software

There are thousands of known viruses, and more appear all the time. Installing antivirus software is the only way to protect your data, software and hardware. Regular updates are necessary to ensure protection.

Your computer dealer can advise you regarding purchasing antivirus software.

Before installing any software from unlicensed sources, scan for viruses. Regularly backup your data to safeguard against loss if your notebook is infected.

Backing Up Files

Regularly backing up your files will protect you from losing data from accidental file deletion, viruses or hard drive failure.

Programs can be reinstalled, unless you have backed up your work, you will lose your data files.
The most convenient way to back up your files is to a CD-RW drive. For smaller files, you can use a floppy disk.

Finding Files

Right click on **Start > Search**.

In the search window, type either **All or part of the file name** or **A word or phrase in the file**.

Specify where you want the system to look by specifying a drive or folder in the **Look in** pull-down menu.

Windows will search the entire hard drive (or drive C partition) if the default setting of C: is unchanged.

Click **Search** to begin searching.

Files found that match your search criteria are listed in the **Search Results** window.

Copying a File on the Hard Drive

From the **Desktop**, select **My Computer**.

Locate the file you want to copy, and click the file to select it.

Under **File and Folder Tasks > Copy this file**.

In the **Copy Items** window, select the location where you want to copy the file.

Click **Copy**.

Copying a File to a Floppy Disk

Insert a floppy disk into the external floppy drive.

From the **Desktop**, select **My Computer**.

Locate the file you want to copy, and click the file to select it.

Under **File and Folder Tasks > Copy this file > Copy Items** > **3½ Floppy (A:)**.

Click **Copy**.

Moving Files

Never move files that are part of an installed program. Doing so may make the program unusable.

From the **Desktop**, select **My Computer**.

Locate the file you want to move, and click the file to select it.

Click **Move this file**.

In the **Move Items** window, click the location where you want to move the file.

Click **Move**.

Renaming Files

Use **Windows Explorer** or **My Computer** to locate the file you want to rename, and click the file to select it.

Click the **File** menu and click **Rename**.

Never change a file's extension (the last three characters after the period). Doing so may render the file unusable.

Type the new filename and press **Enter**.

Deleting Files

Never delete files that are part of an installed program. Doing so may render the file unusable.

Use **Windows Explorer** or **My Computer** to locate the file you want to delete, and click the file to select it.

Click the **File** menu and click **Delete**.

Click **Yes** to send the file to the **Recycle Bin**.

If you accidentally delete a file, see Retrieving Files From the Recycle Bin.

Emptying the Recycle Bin

Files remain in the **Recycle Bin** and take up space on the hard drive until you empty them from the **Recycle Bin**.

Files deleted from a floppy disk or from a network are permanently erased. You cannot recover them from the Recycle Bin.

Double-click the **Recycle Bin** icon.

The **Recycle Bin** window appears and lists all deleted files, their previous locations, and the dates you deleted them.

Click the **File** menu, and click **Empty Recycle Bin**.

When the confirmation dialog box appears, click **Yes** to delete all file(s).

All files disappear from the **Recycle Bin** and are removed from your notebook.

Retrieving Files From the Recycle Bin

Deleted files are moved to the **Recycle Bin** and remain there until you empty the Recycle Bin. If you delete a file in error, you can retrieve it from the **Recycle Bin**:

Double-click the **Recycle Bin** icon.

The **Recycle Bin** window will appear, listing all deleted files, their previous locations, and the dates you deleted them.

Select the file you want to retrieve, click the **File** menu, and then click **Restore**.
The file disappears from the **Recycle Bin** and is moved to its original location.

Playing CDs and Movies

Inserting Discs
Adjusting Volume
Adjusting Picture

Inserting Discs

Be careful not to press down on the drive tray when opening or closing it. When the drive is not in use, keep the tray closed.
Do not move the computer when playing CDs or DVDs.

To insert a disc, do the following:

1. Press the eject button on the front of the drive.
2. Pull the tray out.
3. With the label side up, place the disc in the center of the tray.
4. Snap the disc onto the spindle.
5. Gently push the tray back into the drive.

If your notebook has a CD-RW/DVD or DVD, you can watch movies.

For more information on playing CDs or watching movies, click **Help** on the CD player software or DVD player software.

Adjusting Volume

If you do not hear anything when playing a CD or DVD, check that the speakers are not muted.

Start > All Programs > Accessories > Entertainment > Volume Control.

In the Volume Control window, click and drag the bar in the Volume Control column and slide it up or down to increase or decrease the volume.

Audio Volume Up

Audio Volume Down

Adjusting the Picture

If you receive an error message that the current resolution and color depth are using too much memory and preventing DVD playback, adjust the display properties:

Start > Control Panel > Pick a category > Appearance and Themes > Pick a task... > Change the screen resolution.

In the **Display Properties** window, click and drag the bar in **Screen resolution** to change the setting to 1024 x 768 pixels.

Click the pull-down menu under **Color quality > Medium (16 bit) > OK**.

Caring for Your Notebook

Caring for Your Notebook
Traveling

Caring for Your Notebook

Cleaning Your Notebook and Keyboard
Cleaning the Display
Cleaning the Touch Pad
Cleaning the CD/DVD Drive
Precautions

Never spray cleaning products directly onto your notebook's case or display. Only use products designed for cleaning computer displays.

Cleaning Your Notebook and Keyboard

1. Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.
2. Remove batteries.
3. Use the brush attachment of your vacuum cleaner, gently remove dust from your notebook's openings and keyboard.
4. Use a slightly moistened soft, lint-free cloth, wipe your notebook and keyboard. *Use only water or a recommended computer cleaner.*

Cleaning the Display

1. Shut your notebook down, turn it off and disconnect it from the electrical outlet and any external devices, such as a printer.
2. Remove batteries.
3. Use a slightly moistened soft, lint-free cloth, wipe your notebook's display. *Use only water or a recommended computer cleaner*.

Cleaning the Touch Pad

1. Shut your notebook down, turn it off and disconnect from the electrical outlet and any external devices, such as a printer.
2. Remove batteries.
3. Use a slightly moistened soft, lint-free cloth, carefully wipe the Touch Pad, being careful not to allow any moisture into the gaps. *Use only water or a recommended computer cleaner*.

Cleaning the CD/DVD Drive

Never touch the lens. Use only compressed air to clean the lens.

If you experience problems playing CDs or DVDs, including skipping, clean the unlabelled side of the disc with a soft, lint-free cloth or using a commercial product.

Precautions

- Don't spill liquids on the keyboard. If liquid is spilt on the keyboard, turn your notebook off immediately. Leave off overnight to let it completely dry out before using it again.
- Don't turn off your notebook if a drive light indicates a drive is active. Turning off your notebook while it is reading from or writing to a disk may damage the disk, the drive, or both.
- Keep your notebook and disks away from objects that generate strong magnetic fields, such as stereo speakers. Information on disks is stored magnetically. Placing a magnet too close to a disk can erase important files.
- Scan all new files for viruses. This precaution is especially important for files you receive via email, disk or download from the Internet. You will need a special program to scan for viruses. For further information, talk to your computer dealer.

Traveling

Identifying Your Notebook
Packing Your Notebook
Setting a Password
Travel Tips
If Your Notebook Is Lost or Stolen

Identifying Your Notebook

Attach a nametag or business card to your notebook, or use a permanent marker or stencil to write a unique identifying mark (such as your driver's license number) on the case.

Create a file on the Desktop called **if found**. Place information such as your name, address, and telephone number in this file.

Contact your credit card company, and ask if it offers coded identification tags.

Packing Your Notebook

Remove any external devices attached to the computer and store them in a safe place. Remove any cables attached to installed PC Cards, and remove any extended PC Cards.

Fully charge the main battery and any spare batteries you plan to carry with you.

Turn off the computer or put the computer into hibernate mode.

Disconnect the AC adapter.

Remove any extraneous items, such as paper clips, pens, and paper, from the keyboard and then close the display.

Pack your notebook and accessories in their carry case.

Avoid packing the computer with items such as shaving cream, colognes, perfumes, or food.

Protect the computer, the batteries, and the hard drive from hazards such as extreme temperatures, dirt, dust, liquids, or overexposure to sunlight.

Pack the computer so that it does not slide around in the trunk of your car or in an overhead storage compartment.

When traveling by air, never check your notebook as baggage.

Setting a Password

To provide extra protection for your data and documents, it is advisable to set a password.

As your notebook is booting (starting up), press **F2** to take you to the **BIOS Setup Utility**. Use the right arrow key to highlight **Security**.

Use the down arrow key to select: **Set Supervisor Password**. Press **Enter**.

Type your password, press **Enter** and re-type to confirm. Press **Enter**.

Use the right arrow key to select **Exit,** use the down key to select **Exit Saving Changes**. Press **Enter** and **Yes.** Your notebook will now boot as normal.

*To enable password protection on Boot, use the down key to select **Password on boot**. Press **Enter** and **Enabled**.*

Travel Tips

- If you are traveling internationally, carry proof of ownership - or of your right to use the computer if it is company-owned - to speed your passage through customs. Investigate the customs regulations of the countries you plan to visit and consider acquiring an international carnet (also known as a merchandise passport) from your government.
- Ensure that you know which electrical outlets are used in the countries you will visit, and have appropriate power adapters.
- Check with your credit card company for information about the kinds of emergency travel assistance it offers to users of portable computers.
- When traveling by air, ensure that you have a charged battery available in case you are asked to turn on the computer.
- Before you use the computer on an airplane, verify that such usage is permitted. Some airlines forbid the use of electronic devices during the flight. All airlines forbid the use of electronic devices during takeoff and landing.

Never walk your notebook through a metal detector. Send it through an X-ray machine, or have it manually inspected.

If Your Notebook Is Lost or Stolen

Call a law enforcement agency to report your notebook lost or stolen. Ask that a case number be assigned and write down the number, along with the name, address, and telephone number of the law enforcement agency. If possible, obtain the name of the investigating officer.
If the notebook belongs to a company, notify the security office of the firm.

Peripherals

PC Cards and Express Cards
Adding and Removing SD/MMC/MS/MS PRO Cards
Memory Modules

PC Cards and Express Cards

PC Card Types
Extended PC Cards
Installing a PC Card
Removing a PC Card
Express Card Types
Installing and Removing Express Cards

PC Card Types

The PC Card slot supports one Type II card. It also supports CardBus technology and extended PC Cards. "Type" refers to the card's thickness, not what it does.

A PC Card is not a bootable device.

Extended PC Cards

An extended PC Card is longer than a standard PC Card. When using extended PC Cards, follow these precautions:

- Protect the exposed end of an installed card. If the end of the card is struck, the system board may be damaged.
- Always remove an extended PC Card before packing your notebook in its carry case.

Installing PC Cards

PC Cards may be 'hot-swapped', which means you can install a card while your notebook is running. The card will be detected automatically.

Usually PC Cards have a mark or symbol to show which end to insert into the slot. Cards are keyed to prevent incorrect insertion. Check the documents that came with your card if the orientation is unclear.

1. Hold the card with its orientation symbol pointing into the slot and the topside of the card facing up. The push-button latch may need to be in before inserting the card.
2. Slide the card into the slot until it clicks into the connector.
3. If you encounter too much resistance, do not force the card. Check the card orientation and try again.

Your notebook will recognize most PC Cards and automatically load the appropriate device driver. If the configuration program tells you to load the manufacturer's drivers, use the floppy disk or CD that came with the PC Card.

Removing PC Cards

Before removing a PC Card, stop it running from the configuration utility on the taskbar. Failure to do so could result in data loss. Never try to remove a PC Card by pulling on its cable, if one is attached.

1. Press the release latch.
2. Press the latch again to eject the card.
3. Remove the card.

Express Card Types

The Express Card slot supports one 54mm type PCI-Express card. It supports both USB 2.0 and PCI Express technology, which improves bus speed in data transfer and requires less power than PC Cards.

Installing and Removing Express Cards

Express Cards, with hot-plug feature, allow you to install and remove cards when your notebook is running. The card will be detected automatically when installed.

Usually Express Cards have a mark or symbol to show which end to insert into the slot. Insert the card according to the orientation symbol, and slide the card into the slot.

To remove it, pull it out gently.

Adding and Removing SD/MMC/MS/MS PRO Cards

Before removing a SD/MMC/MS/MS PRO card, stop it running from the configuration utility on the taskbar. Failure to do so could result in data loss.

Insert the SD/MMC/MS/MS PRO card into the Card reader slot.

To remove the SD/MMC/MS/MS PRO Card, push it in gently and it ejects automatically.

Memory Modules

You can add more memory modules to your computer in order to give it improved performance.

To install a memory module:

1. Remove the two screws securing the memory module cover.
2. Lift off the memory module cover.
3. There are two memory module ports here. The first one is already occupied by your computer¡¦s current memory module. Place the new memory module in the second slot, matching up the notch along its connector rim with the tooth in the connection slot.
4. When the module has been securely seated, press down gently on it until it snaps into place.

Depending on how much additional memory you require, you may need to replace the original memory module.

To remove a memory module:

1. Follow the first two steps in the previous procedure.
2. Pop out the two silver latches holding the memory module into place. The module pops up.
3. Grasp the outer edges of the memory module with thumb and forefinger, and then gently remove it.
4. Install your new memory module according steps 3 and 4 in the previous procedure.

The Power System

Power Management
Battery

Power Management

Managing Your Notebook's Power
Power Management Modes
Power Options Properties
SpeedStep

Managing Your Notebook's Power

See **Battery** *for more information on getting the best performance from battery packs.*

Use your notebook connected to an electrical outlet as often as possible, as battery life expectancy is affected by the number of times it is charged.

Your computer comes with built-in power management. You can configure it, through the **Power Options** program in the Control Panel, to sleep, hibernate, and wake according to specific pre-defined situations.

When leaving your notebook unattended for long periods, place it in standby or hibernate mode. You can exit either power management mode by pressing the power button.

Power Management Modes

Standby Mode

This mode conserves power by switching off the hard drive and display after a preset period of inactivity (a time-out). When standby mode is exited, your notebook will return to the same operating state it was before entering standby.

If your notebook loses power from both the electrical outlet and the battery while in standby mode, data may be lost.

To enter standby mode in Windows XP:
Start > Turn off computer > Stand By. Or:

Set your notebook to go to Standby mode:

- When you close the lid of your notebook
- When you press the power button
- When you press the sleep hot key

The settings can be accessed via the **Advanced tab** in Power Options Properties (Start > Control Panel > Pick a category > Performance and Maintenance > Power Options).

To exit standby mode, press the power button. You can not exit standby mode by pressing a key or touching the Touch Pad. For more information on standby mode, see Turning Your Notebook On and Off.

Hibernate Mode

In Hibernate mode, power is conserved by system data being copied to the hard drive, and your notebook is completely shut down. When Hibernate mode is exited, your notebook will return to the same operating state it was in before entering Hibernate mode.

Hibernate mode can be enabled/disabled in the Power Options Properties window.

If enabled, your notebook will go into Hibernate mode if the battery charge level becomes critically low.

Depending on how you set the Power Management Options on the Advanced tab in the Power Options Properties window, use one of the following methods to enter hibernate mode:

- When you close the lid of your notebook
- When you press the power button
- When you press the sleep hot key
- **Start** > **Turn Off Computer** > **Hibernate** (if the Hibernate option does not show, press **Shift**, and the Standby option will switch to Hibernate).

If the Hibernate option is not available for these methods, Hibernate mode has not been enabled.

Check the **Enable hibernation** box on the Hibernate tab of the Power Options Properties window and click **Apply** to enable Hibernation.

If your PC Cards do not operate correctly after exiting Hibernate mode, remove and reinsert the card or restart your notebook.

To exit Hibernate mode, press the power button. You cannot exit Hibernate mode by pressing a key or touching the Touch Pad. For more information on Hibernate mode, see Turning Your Notebook On and Off.

Power Options Properties

To access the Windows Power Options Properties window:
Start > Control Panel > Pick a category > Performance and Maintenance > Power Options

Power Schemes Tab

The Power Schemes pull-down menu in the Power Options Properties displays the selected preset power scheme.

To maximize battery power, use the Portable/Laptop power scheme.

In Windows XP the processor's performance level depends on the power scheme you select. You do not need to make any further adjustments to set the performance level. Each preset power scheme has different time-out settings for entering standby mode, hibernate mode, turning off the display, and turning off the hard drive. For more information on power management options, see the Help and Support Center.

Alarms Tab

Enable audible alarms by clicking each Alarm Action button and selecting Sound alarm.

The Low battery alarm and Critical battery alarm settings alert you when the battery charge falls below a certain percentage.
When you receive your notebook, the Low battery alarm and Critical battery alarm check boxes are selected. See **Battery** for more information on low-battery warnings.

Power Meter Tab

Displays the current power source, battery status and charge amount.

Advanced Tab

With the Advanced tab you can:

- Set power icon and standby mode password options.
- Depending on your operating system, program the following functions by clicking an option from the corresponding pull-down menu, and then clicking **OK**.
  - Set the computer to **Stand by/Hibernate/Do nothing** when you close the laptop lid
  - Set the computer to **Ask me what to do/Stand by/Hibernate/Shut down/Do nothing** when you press the power button.
  - Set the computer to **Ask me what to do/Stand by/Hibernate/Shut down/Do nothing** when you press the sleep hot key.

Hibernate Tab

The Hibernate tab lets you enable hibernate mode by clicking the **Enable hibernation** check box.

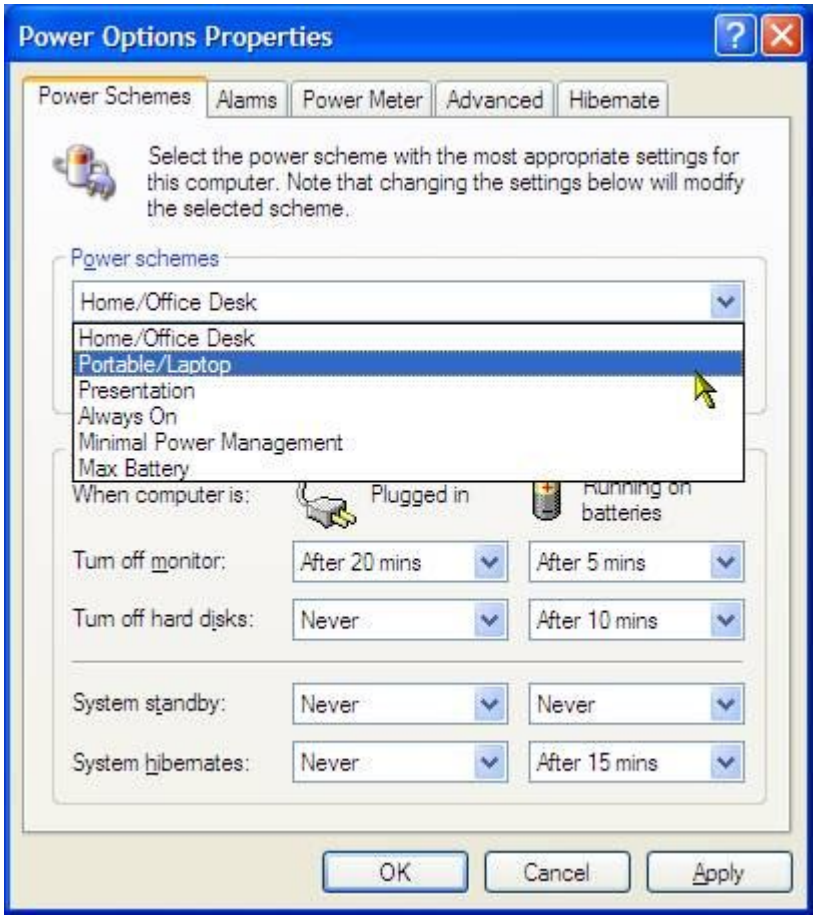
SpeedStep

Your notebook is equipped with SpeedStep technology to better manage power consumption. It changes the processor speed to find the best balance between your computing performance and power consumption needs. Higher speeds enjoy better performance, while slower speeds conserve more power.

In Windows XP, the processor's performance level depends on the Power Scheme you select (see Power Options Properties). You do not need to make any further adjustments to set the performance level. Each preset power scheme has different time-out settings for entering standby mode, hibernate mode, turning off the display, and turning off the hard drive.

For example, the **Portable/Laptop mode** automatically changes SpeedStep modes depending on if you are running the computer on AC power or batteries in order to prolong battery usage while still providing optimal performance.

You can also individually alter and save each of these settings and schemes if desired.



Windows XP automatically chooses the SpeedStep mode to find the most appropriate speed for your processor according to the Power Scheme you choose and your current system demands.

Battery

Battery Performance
Checking the Battery Charge
Power Meter
Low-Battery Warning
Charging the Battery
Removing a Battery
Installing a Battery
Storing a Battery
Working With Extra Battery Packs
Maximizing Battery Life

Battery Performance

The performance of the battery can vary, depending on operating conditions. Your battery may last less time if you are running power-intensive programs, playing CDs or DVDs, using PC Cards or have high display-brightness settings.

The **Power Management Options** can be set to alert you when the battery charge is low.

Ensure any battery you use is compatible. Failure to do so may risk fire or explosion. For more details on purchasing compatible batteries, contact your notebook retailer.

Batteries should never be disposed of with household waste. Contact your local waste disposal or environmental agency for advice on disposing of used lithium-ion batteries.

Only use the BATEL80L6 or BATEL80L9 battery pack with this computer.

Checking the Battery Charge

Battery Status	**Indicator behavior**
Charging	Solid amber
Fully Charged	Solid green
Discharging	Off
Critical Low	Blinks amber > approximately 3 minutes left; system beeps

Power Meter

The power meter indicates the remaining battery charge. When your notebook is running on battery power, you can check the remaining battery charge, double click the icon on the taskbar.

For more details, including how to make the icon appear on the taskbar if it is not already, see Power Management.

Low-Battery Warning

After a low-battery warning, save your work immediately, then connect your notebook to an electrical outlet. Hibernate mode will begin automatically if the battery runs completely out of power.

You will hear the low-battery warning when the battery charge is approximately 90 percent depleted.

Your notebook will beep once, indicating approximately 10 to 15 minutes of battery operating time remain. If you do not connect your notebook to alternative power source during that time, there will be a periodic beep. Your notebook will automatically enter hibernate mode if the battery charge reaches a critically low level. For more information, see Power Management.

Charging the Battery

When connected to an electrical outlet, a completely discharged battery needs to be charged in 4 to 12 hours (depending on whether your notebook is on or off and what programs, if any, are running). You can leave the battery in your notebook as long as you like. The battery's internal circuitry prevents the battery from overcharging.

Before using the battery for the first time it must be charged. Connect the computer to an electrical outlet and allow the battery to fully charge, indicated by the battery indicator light on the front panel of the notebook.

Once a battery pack is fully charged for the first time, use your notebook on battery power until the battery discharges completely. This will extend battery life, and helps ensure accurate monitoring of battery capacity.

If necessary, the battery will be charged whenever your notebook is connected to an electrical outlet. The battery will not be charged if it or your notebook is too hot, either from use or being in a hot environment. If this occurs, the battery indicator will light amber. Disconnect your notebook from any electrical outlet, and allow it and the battery to cool to room temperature. You can then reconnect your notebook to the electrical outlet and charge the battery. The battery indicator will also light amber if the battery is bad and needs replacing.

Removing the Battery

Before removing the battery, ensure your notebook is turned off.

1. Slide and hold the battery release latch.
2. Remove the battery.

Installing a Battery

1. Slide the battery into the bay.
2. Press it into place gently but firmly until the latch locks it into place.

Storing a Battery

If storing your notebook for an extended period of time, remove the battery. Fully charge the battery before using your notebook again.

Working With Extra Battery Packs

If you spend a lot of time traveling, working without connecting your notebook to an electrical outlet, it may be a good idea to carry additional battery packs so you can quickly replace a discharged battery and continue working.

Maximizing Battery Life

A battery can be recharged many times, but over time it will lose its ability to hold a charge. To maximize battery life:

- If you will not be using your notebook for a long period, remove the battery.
- If you have a spare battery pack, alternate the batteries.
- Ensure your notebook is off when replacing the battery.
- Store spare battery packs in a cool, dry place, out of direct sunlight.

The BIOS Setup Program

Introduction
Navigation through the BIOS Setup Program
The Main Menu
The Advanced Menu
The Security Menu
Others Menu
Boot Menu
Exit Menu

Introduction

The BIOS (Basic Input and Output System) Setup program is a menu driven utility that enables you to make changes to the system configuration and tailor the operation of your notebook to your individual work needs. A ROM-based configuration utility displays the system's configuration status and provides you with a tool to set system parameters. These parameters are stored in nonvolatile battery backed-up CMOS RAM, which saves this information even when the power is turned off. When the computer is turned back on, the system is configured with the values found in CMOS. Using easy-to-use menus, you can configure such items as:

- Hard drives, diskette drives and peripherals
- Video display options
- Password protection from unauthorized use
- Boot devices

The settings made in the Setup program intimately affect how the notebook performs. It is important, therefore, first to try to understand all the available options, and second, to make settings appropriate for the way you use the notebook. This chapter guides you through the Setup program by providing clear explanations for all Setup options.

A standard configuration has already been set in the Setup program by the factory technicians, so you will very likely have little to worry about for now. However, eventually you may want to customize your system to suit your own performance needs. It is recommended that you read this chapter and become familiar with the adjustments that can be made in the BIOS.

The next section explains how to move around in the Setup program, as well as how to specify and save your new settings. A brief discussion of the optional settings among the different submenus follows.

Navigating through the BIOS Setup Program

Accessing the BIOS Setup program
Launching submenus
Saving Changes and Exiting the Setup Program

The Setup program has been designed to make it as easy to use as possible. It is a menu driven program, which means you can scroll through the various directories and make your selections among the various predetermined choices. If you accidentally configure a setting and do not know which one to switch back to, use the BIOS hot keys to return to the previous value. The hot keys are discussed in more detail later in this chapter.

When turning on the notebook for the first time you may get a message prompting you to run the BIOS Setup program. A warning message may appear on the screen if the hardware configuration is changed or the POST fails. This message will inform you of any errors or invalid settings and prompt you to run the Setup program to correct the problem.

Even if you are not prompted by a message instructing you to use the Setup program, at some time in the future you may want to change the configuration of your computer. For example, you may want to make changes to the display option settings or enable the notebook's password function for security purposes. It will then be necessary to reconfigure your system using the Setup program so that the computer can recognize these changes.

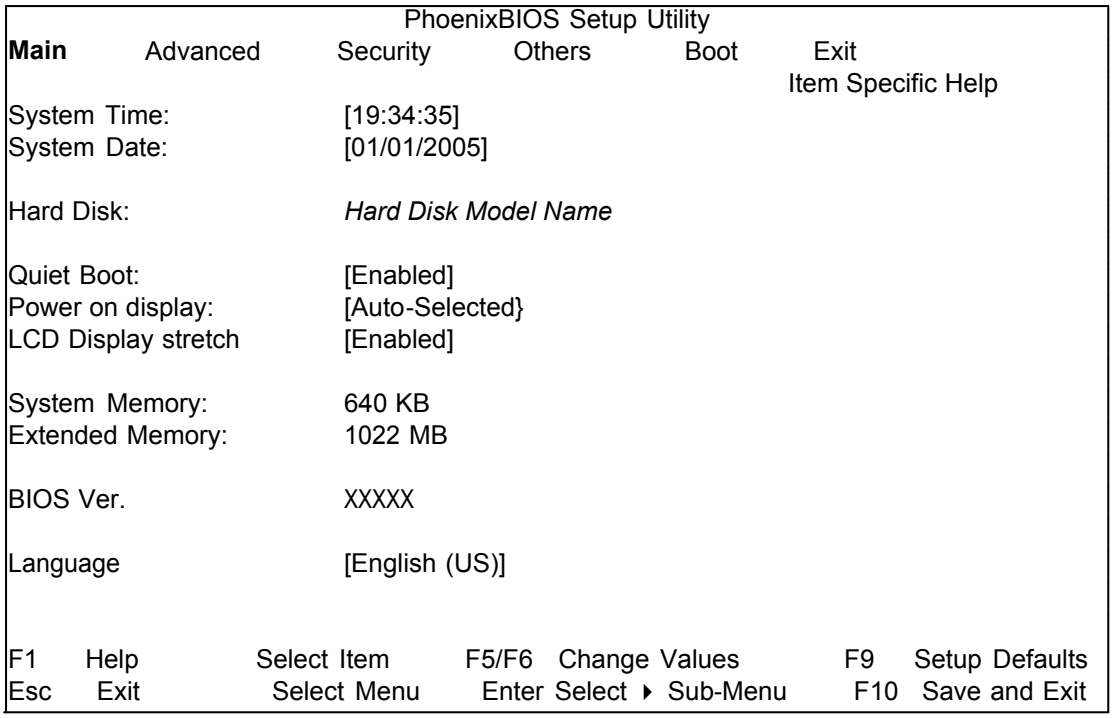
The list below gives a few examples of reasons why you may want or need to run the BIOS Setup program.

- You have set up the computer for the first time and you got a message stating that you should run the BIOS Setup program.
- You want to redefine the communication ports to prevent any conflicts.
- You want to change the password or make other changes to the security setup.

The few examples listed above are by no means a complete list.

Accessing the BIOS Setup program

To access the BIOS Setup program, press the F2 key as soon as the computer starts up and you see the Phoenix BIOS screen.


PhoenixBIOS Setup Utility
Main Advanced Security Others Boot Exit
Item Specific Help
System Time: [19:34:35]
System Date: [01/01/2005]
Hard Disk: Hard Disk Model Name
Quiet Boot: [Enabled]
Power on display: [Auto-Selected}
LCD Display stretch [Enabled]
System Memory: 640 KB
Extended Memory: 1022 MB
BIOS Ver. XXXXX
Language [English (US)]
F1 Help Select Item F5/F6 Change Values F9 Setup Defaults
Esc Exit Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

The Menu Bar

The top of the Setup screen has a menu bar with the following selections:

Main Allows the user to configure standard IBM PC AT system parameters.
Advanced Allows the user to configure advanced system settings.
Security Allows the user to configure security system settings.
Others Allows the user to configure miscellaneous system settings.
Boot Allows the user to specify the order in which the notebook is to check for a device to boot the system.
Exit Allows the user to exit the Setup program.

To move between menu bar items, use the [◄] and [►] arrow keys until the desired item is highlighted. For example, if you want to move from the Main menu to the Advanced menu, press the right arrow key [►] once.

Item Specific Help

At the right of the Setup screen, you will notice an item specific help bar. For each item that you select on the menu, the bar informs of its specific function as well as the hot keys related specifically to that item and/or submenu.

Launching submenus

A submenu contains additional options for a field parameter. To call up a submenu, simply move the highlight to the desired field and press the [Enter] key. The submenu opens.

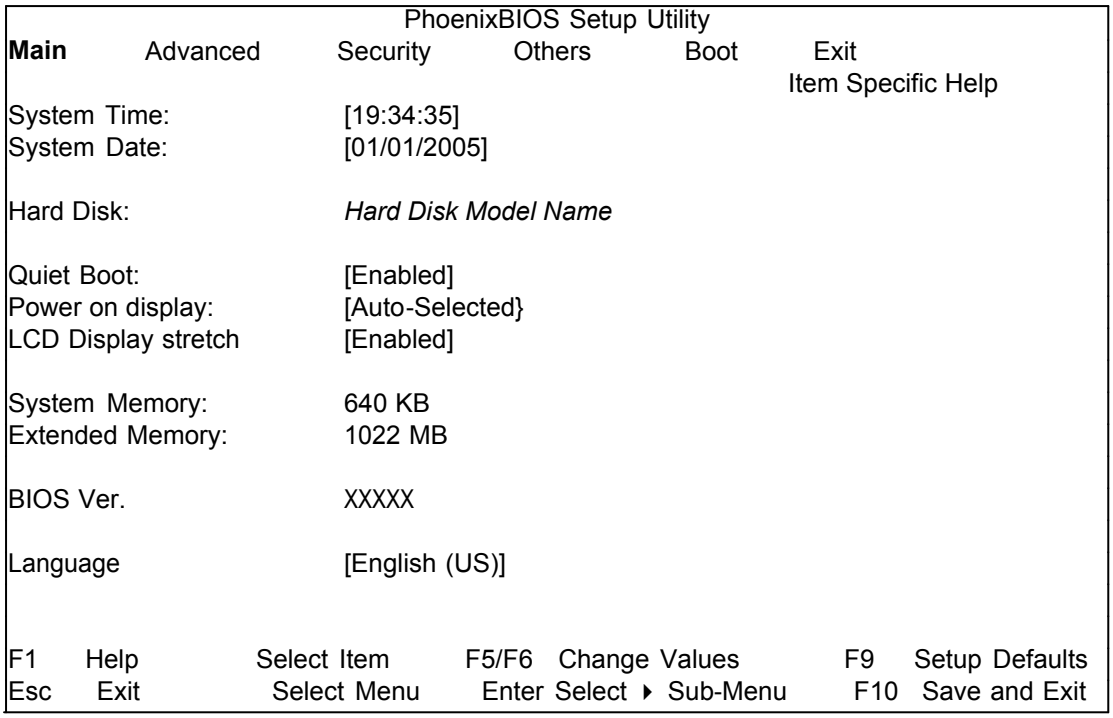
If you are a first time user or are not familiar with BIOS Setup programs, it is highly recommended that you take a few minutes to familiarize yourself with each of the submenus and their corresponding functions. If you accidentally make unwanted changes to the current configuration, go to the Exit menu and select Discard Changes.

Saving Changes and Exiting the Setup Program

See Exit Menu for detailed information on saving changes and exiting the Setup program.

The Main Menu

When the Setup program is accessed, the Information screen appears. It displays the following pieces of information regarding your current system:


PhoenixBIOS Setup Utility
Main Advanced Security Others Boot Exit
Item Specific Help
System Time: [19:34:35]
System Date: [01/01/2005]
Hard Disk: Hard Disk Model Name
Quiet Boot: [Enabled]
Power on display: [Auto-Selected}
LCD Display stretch [Enabled]
System Memory: 640 KB
Extended Memory: 1022 MB
BIOS Ver. XXXXX
Language [English (US)]
F1 Help Select Item F5/F6 Change Values F9 Setup Defaults
Esc Exit Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

System Time and System Date
The hour is displayed with 24-hour format. The values set in these two fields take effect immediately.

Hard Disk
The hard disk information is displayed with the manufacturer and model name.

Quiet Boot
Enabled: Customer logo is displayed; Summary screen is disabled.
Disabled: Customer logo is not displayed; Summary screen is enabled.

Power on Display
This option is auto-selected. Displays on an external monitor if connected, otherwise it will be displayed on the laptop LCD.

LCD Display Stretch
Disabled: Disables vertical LCD stretch; enables horizontal LCD stretch.
Enabled: Enables vertical LCD stretch; enables horizontal LCD stretch.

System Memory
This field reports the memory size of system base memory. The size is fixed to 640KB.

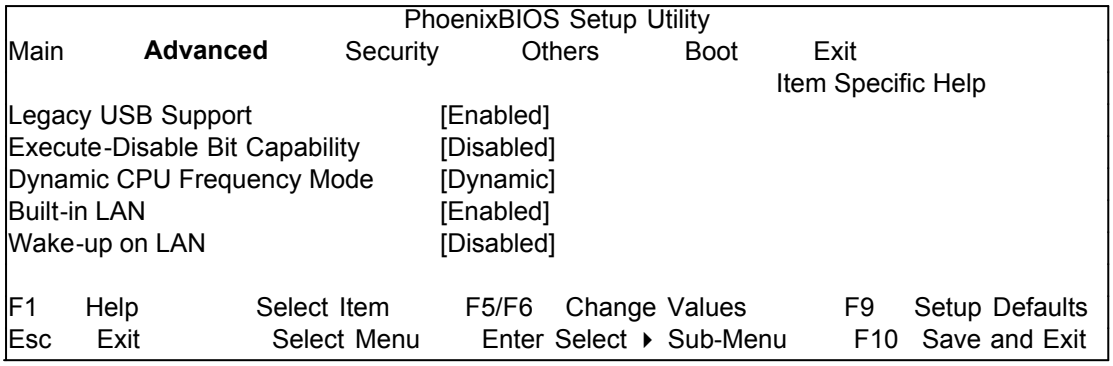
Extended Memory
This field reports the memory size of the extended memory with an integer in the system, but 32Bit SMI will occupy 1 MB and UMA frame buffer (Integrated VGA uses only).
Extended Memory size = Total memory size - 1 MB – 1 MB – UMA frame buffer

BIOS Ver
This field displays current version of the BIOS.

Language
This field allows the user to change the languages among English, Japanese, and French.

The Advanced Menu

Selecting *Advanced* on the menu bar displays the Advanced Menu. Each field on this menu is covered below.



Legacy USB Support
Disabled: Disables the legacy USB support.
Enabled*:* Enables the legacy USB support.

Execute-Disable Bit Capability
Disabled: Forces the Execute-Disable Bit Capability extended feature bit to always return to 0.
Enabled: Enabled.

Dynamic CPU Frequency Mode
Always Low: The CPU always runs at low power consumption and low speed.
Dynamic: When the computer is in use, CPU operation is automatically switchable when necessary.

Built-in LAN
Disabled: Disables built-in LAN.
Enabled: Enables built-in LAN.

Wake-up on LAN
Disabled: Disables wake-up on LAN.
Enabled: Enables wake-up on LAN.

The Security Menu

The notebook's advanced security system allows you to set a password to prevent unauthorized access to system resources, data, and the BIOS Setup program. This section covers each Security parameter. Selecting *Security* from the menu bar displays the Security menu.

A Note about Passwords
The BIOS Setup program allows you to specify passwords in the Security menu. The passwords control access to the BIOS and certain Security menu options during system startup.
Passwords are not case sensitive. A password can be entered using either upper or lower case letters; it makes no difference. When you choose your password, it should be composed of characters A-Z, 0-9 and eight characters in length.
NOTE: The administrator password must be set before the user password can be set.

Set User Password… / Set Admin Password…

PhoenixBIOS Setup Utility					
Main	Advanced	**Security**	Others	Boot	Exit
					Item Specific Help
User Password Is:		Clear			
Supervisor Password Is:		Clear			
Set User Password:		[Enter]			
Set Supervisor Password:		[Enter]			
Built-in HDD Status		Clear			
Built-in HDD Password Select		[User Only]			
Set HDD User Password		[Enter]			
▸ Trusted Platform Module Setting					
F1 Help	select item	F5/F6 change values			F9 Setup defaults
Esc Exit	select menu	Enter Select ▸ Sub-Menu			F10 Save and Exit

These fields allow you to set the System Password. The System Password allows full access to the BIOS Setup menus. To set the Supervisor password, highlight this field and press [Enter].
Type the password and press the [Enter] key. You can type up to ten alphanumeric characters. Symbols are ignored.
To confirm the password, type the password again and press the [Enter] key.

User Password Is / Supervisor Password Is
These two fields shows that User /Supervisor Passwords are set or not.
Set: System Password is set.
Clear:System Password is not set.

Set Supervisor Password / Set User Password
Enter this field always shows the message.
While this field is highlighted, press “Enter”. The following message is shown:

Set Supervisor Password	
Enter New Password	[ ]
Confirm New Password	[ ]

If there is an old password then setup will prompt with the following window instead and a current password will be required to be entered at first:

Set Supervisor Password	
Enter Current Password	[ ]
Enter New Password	[ ]
Confirm New Password	[ ]

User can type password in field of “Enter New Password”, and re-enter password in field of “Confirm New Password “ for verification.

If verification OK:

Setup Notice
Changes have been saved.
[Continue]

The supervisor password is set complete after user press “Enter”.
If verification fails:

Setup Warning
Passwords do not match.
Re-enter Password.
[Continue]

If password on boot is required, the password must be set otherwise it cannot be enabled.
The formats of the password are as follows:
Length: No more than 8 characters.
Characters: Alphanumeric keys only. The shift status, Ctrl, Shift, Alt, and Capital, are ignored.

Built-in HDD Status
Set: HDD Password is set.
Clear: HDD Password is not set.

Built-in HDD Password Select
User Only For normal user entering HDD password.
User+Master Master password must be set first before user password can be configured.

Set HDD User Password / Set HDD Master Password
Enter this field always shows the message.
While this field is highlighted, press “Enter”. The following message is shown:

Set HDD Master Password	
Enter New Password	[ ]
Confirm New Password	[ ]

If there is an old password then setup will prompt with the following window instead and a current password will be required to be entered at first:

Set HDD Master Password	
Enter Current Password	[ ]
Enter New Password	[ ]
Confirm New Password	[ ]

User can type password in field of “Enter New Password”, and re-enter password in field of “Confirm New Password “ for verification.
If verification OK:

Setup Notice
Changes have been saved.
[Continue]

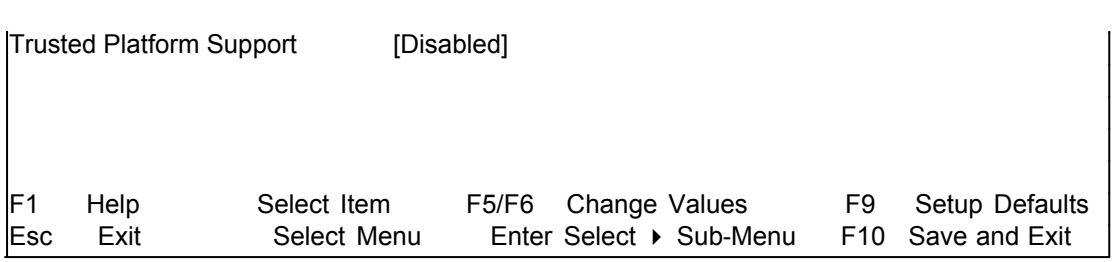
The HDD password is set complete after user press “Enter”.
If verification fails:

Setup Warning
Passwords do not match.
Re-enter Password.
[Continue]

If password on boot is required, the password must be set otherwise it cannot be enabled.
The formats of the password are as follows:
Length: No more than 8 characters.
Characters: Alphanumeric keys only. The shift status, Ctrl, Shift, Alt, and Capital, are ignored.

Trusted Platform Module Setting

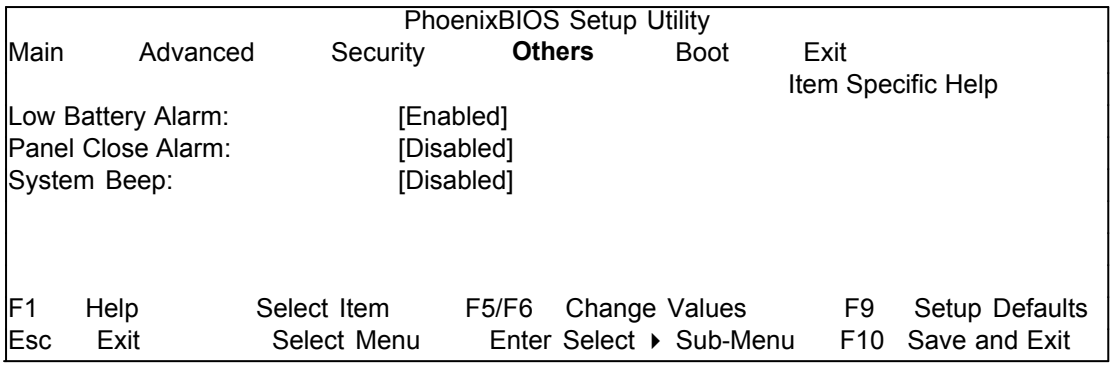
PhoenixBIOS Setup Utility					
Main	Advanced	**Security**	Others	Boot	Exit
Trusted Platform Module Setting					Item Specific Help
Security Chip State		Enabled			
		Deactivated			


Trusted Platform Support [Disabled]
F1 Help Select Item F5/F6 Change Values F9 Setup Defaults
Esc Exit Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

Security Chip State
Enabled & Activate: Enable security chip encrypted data and user from taking ownership.
Disable & Deactivate: Disable security chip prevents encrypted data from being used and Deactivated security chip prevents a user from taking ownership.

Trusted Platform Support
Disabled: Disables Trusted Platform Module support.
Enabled: Enables Trusted Platform Module support.

Others Menu


PhoenixBIOS Setup Utility
Main Advanced Security Others Boot Exit
Item Specific Help
Low Battery Alarm: [Enabled]
Panel Close Alarm: [Disabled]
System Beep: [Disabled]
F1 Help Select Item F5/F6 Change Values F9 Setup Defaults
Esc Exit Select Menu Enter Select ▸ Sub-Menu F10 Save and Exit

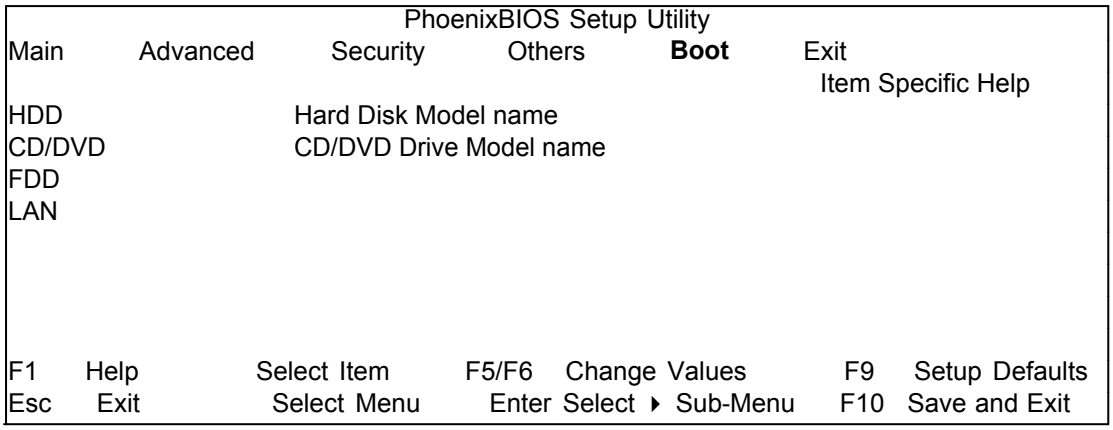
Low Battery Alarm
Disabled: The system will not sound an alarm when battery power is low.
Enabled: The system will sound an alarm when battery power is low.

Panel Close Alarm
Disabled: The system will not sound an alarm when the LCD cover is closed.
Enabled: The system will sound an alarm when the LCD cover is closed.

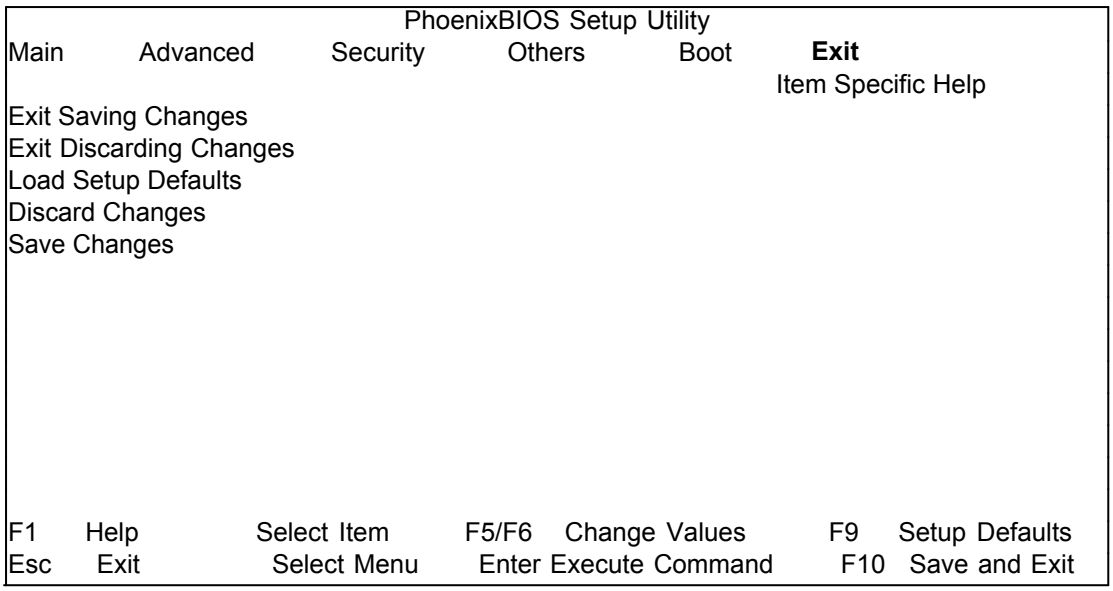
System Beep
Disabled:The system will not beep prior to booting the OS.
Enabled: The system will beep prior to booting the OS.

Boot Menu

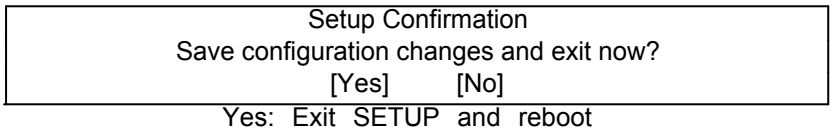
This menu allows the user to decide the order of boot devices to load the operating system. Bootable devices include the diskette drive in module bay, the onboard hard disk drive and the CD-ROM in module bay.



Exit Menu

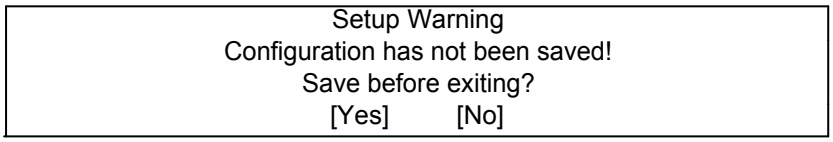

PhoenixBIOS Setup Utility
Main Advanced Security Others Boot Exit
Item Specific Help
Exit Saving Changes
Exit Discarding Changes
Load Setup Defaults
Discard Changes
Save Changes
F1 Help Select Item F5/F6 Change Values F9 Setup Defaults
Esc Exit Select Menu Enter Execute Command F10 Save and Exit

Exit Saving Changes
Allows the user to save changes to CMOS and reboot system. The following message is prompted when user press “Enter” on the item.

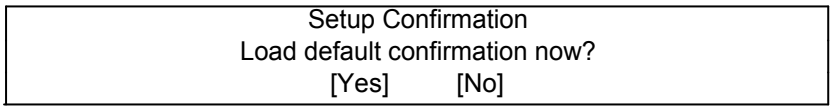


Yes: Exit SETUP and reboot
No: Go back to previous screen

Exit Discarding Changes

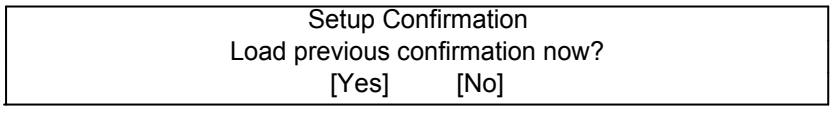


Load Setup Defaults
Allows the user loads default value in CMOS Setup. The following message is prompted when user press “Enter” on this item:



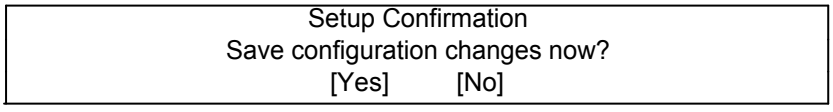
Select **Yes** to confirm or **No** to abort. You will then return to the setup screen.

Discard Changes
Allows the user loads previous value in CMOS Setup. The following message is prompted when press “Enter” on this item:



Select **Yes** to confirm or **No** to abort. You will then return to the setup screen.

Save Changes
Allows the user to save changes and not exit Setup. The following message is prompted when press “Enter” on this item:



Select **Yes** to confirm or **No** to abort. You will then return to the setup screen.

Specifications

CPU

- Intel Yonah Processors 667 MHz / 2MB L2
- HEL81- Dual Core /Single Core
- Up to Intel’s roadmap

Chipset

- HEL81- Intel Calistoga-GM (945GM) for integrated
- INTEL ICH7-M
- 667Mhz FSB supported

Memory

- PC2-4200 (DDRII 533): 256MB, 512MB, 1GB, 2GB
- PC2-5300 (DDRII 667): 256MB, 512MB, 1GB, 2GB
- Upgradeable to 4GB Memory by two sets of 2GB SODIMM
- Two channel design

System ROM

- 1MB flash BIOS ROM

Video Chip

- UMA

Display

- Support 15.4” WXGA (1280 x 800)

Keyboard

- ENE 910L K/B controller
- 86-US/87-UK/88-BZ/91-JA Key; 12 function keys;
- 4 cursor keys;
- Windows Keys; Application Key, 19.05mm pitch, 2.5mm stroke, H=5.7mm

HDD

- One 2.5", 9.5mm Hard Disk, Up to 100GB
- Bus Master IDE
- 9.5m/m, 2.5”HDD Support
- Support Ultra 100 synchronous DMA

Select Bay devices

- 12.7mm, CD-ROM Drive
- 12.7mm, DVD-ROM Drive
- 12.7mm, CD-RW/DVD Combo V Drive
- 12.7mm, Rambo V drive (Super Multi)

Options

- 256MB/512MB/1GB SO-DIMM DDR-ll
- Li-ION Battery Pack
- PCI-E Wireless module

Touch Pad with two buttons

- Left Button
- Right Button

I/O Ports

- USB 2.0 ports x 3

- VGA port, 15 pins x 1
- Microphone-in x 1
- Headphone-out jack x 1
- DC-in jack x 1
- RJ-11 jack for 56Kbps V.92 Modem (US/Canada/UK/Germany/French)
- RJ-45 jack x 1
- Kensington lock
- TV-Out (S-Video) x1
- IEEE 1394 port x 1
- 3-in-1 card reader for SD-host/MMC/MS
- External USB FDD
- PCMCIA slot *1
- New Card slot *1

PCMCIA Card Organization

- ENE CB714
- PC Card 95 supported with one type-II card sockets
- No ZV-Port support
- Power switch ENE CP2211
- Additional 1394 Controller VIA VT6311S

Excellent Power Management Function

- Standby mode, Suspend to RAM or Suspend to Disk mode, by time out or by hot key
- HDD Local Stand-By mode by time out
- LCD Local Stand-By mode by time out
- Low battery alarm by beep
- Auto-backlight off when LCD cover closed
- Full ACPI 2.0 supported
- LCD Auto-DIM mode by time out

Switch

- Power switch
- Lid switch
- Easy buttons
- Volume up
- Volume down
- Mute

AC Adapter

- Universal AC adapter. 90-240V AC, 47-63HZ
- 75W with 19V DC output
- 3 pin type for AC inlet

Memory Card & SO-DIMM Socket

- 256M/512M/1GB/2GB +1.8V 200-pins DDR II SO-DIMM Memory module upgradable.

PC Card Port
Supports one Type II PC Card. For more information, see 4.1 PC Cards and Express Cards.